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WAGES OF AGRICULTURAL LABOR
A IN THE UNITED STATES

By

Louis J. Ducoff

In Consultation with a Bureau-wide Committee
under the Project Leadership of

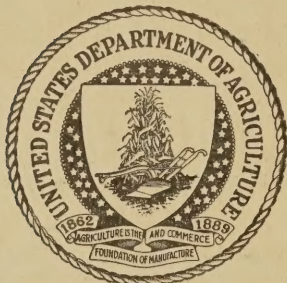
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FOREWORD

Ten years ago farm wage rates and earnings of farm laborers were objects of public concern because they were so low. "They Starve That We May Eat" was the dramatic title of the report of a Survey of Farm Labor. Today Government is concerned with "stabilizing" farm wage rates, that is, setting ceilings above which farm wage rates may not rise. Ten years ago the Department of Agriculture received many reports of substandard wage rates and of devices used by unscrupulous employers to reduce even those small payments to farm workers. Today the Department receives reports of some employers finding ways and means of paying their workers more than the ceilings call for.

Only a small proportion of the farms of the Nation use any considerable amount of hired labor, but much of the labor they employ is needed at critical periods to assure production of the crop. In the case of the harvesting of perishable commodities, the work must be done within a relatively short period. Consequently, the wage structure in agriculture bears directly on the prospects of production.

This study provides a comprehensive treatment of wage rates and wages of agricultural laborers in the United States. It relates the problems of low-income farmers with those of hired farm workers. It traces the relationship of levels of employment and unemployment in industry and other nonagricultural sectors of the economy to the economic welfare of farmers and farm laborers. Underemployment of farmers or unpaid family workers, unemployment of hired farm workers, and low farm wage levels are shown to be related manifestations of the common problem of a labor supply in excess of job or productive work opportunities. Problems of labor supply are in turn related to urban employment conditions, farm population changes, and rural-urban migration.

Full employment under wartime conditions has tempered the disadvantages which have for so long been the lot of hired farm laborers. Many of the former problems may be with us again with the return of peace unless concrete measures are taken in time to preserve and build upon the gains that have resulted as a byproduct of war. This report should prove useful to all workers who want to understand the problems of agricultural wages and should be helpful in meeting the problems of farm labor which have been temporarily put aside.

H. R. Tolley

H. R. Tolley, Chief
Bureau of Agricultural Economics

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WAGES OF AGRICULTURAL LABOR IN THE UNITED STATES

By Louis J. Ducoff, Agricultural Economist

INTRODUCTION

Farm labor problems have been catapulted into prominence by the Nation's need for maximizing agricultural production in wartime. Under the wartime conditions of a growing scarcity of labor and high farm incomes, farmers have found it necessary to improve their competitive position in the labor market by raising wage rates paid to farm laborers. Competition with nonagricultural employers and of farmers among themselves for the limited supply of laborers has led to a rapidly rising farm wage level during the past 3 years.

The agricultural manpower situation has generated important issues in public discussion and has led to various governmental measures and programs for assuring a farm working force adequate to produce the vitally needed food and fiber. Deferment of agricultural workers from military service, recruitment of farm laborers from domestic and foreign sources, and inauguration of measures for controlling job shifts from agriculture to other industries are steps which have been taken to retain and supplement the farm working force. Although these measures have been directed toward the problems of the farm labor supply, they have affected to some extent the movement of farm wage rates. In the absence of such measures, farm wage rates would undoubtedly have risen even more rapidly than they have.

The rise in farm wage rates has generated claims from some quarters that possible further expansions in production are being curtailed through high farm labor costs and excessive labor turn-over. At the same time, others have maintained that in the absence of such wage increases the drain of laborers to more attractive employment opportunities would have affected agricultural production far more seriously. Still others have regarded the trend in farm wages as a necessary complement to the rising level of farm incomes and as a desirable readjustment in farm wage conditions which had been substandard for many years.

More recently, beginnings have been made in stabilizing agricultural wage rates for some crops and areas where excessive labor turn-over and rapid bidding up of wage rates threatened to interfere seriously with the harvesting of these crops. Experience to date with farm wage stabilization indicates the need for a careful balancing of the factors of supply, demand, and ability-to-pay in the crops and areas concerned, as well as consideration of similar conditions in competitive crops or areas and in off-farm opportunities for work. Similar problems affecting the question of agricultural wage rates are involved in other wartime measures for promoting agricultural production, as in the

determination of "prevailing" wage rates to be paid imported workers and workers transported from one State to another. An understanding of the inter-relationships of farm wage rates with broad economic and social conditions which frequently extend much beyond the confines of any one area is important in the formulation of any extensive program for dealing with agricultural wage problems in wartime.

Many of the wartime problems of farm labor and farm wages stem directly from conditions that prevailed during peacetime. The heavy out-migration of farm people and farm workers since 1940 in response to the nonfarm employment opportunities, with the consequent drain on the farm labor supply, was a natural result of the poor economic conditions experienced by them for many years before the war. Similarly, some of the resistance on the part of farmer employers to a rising farm wage level was no doubt due to a sharp awareness of the contrast with the situation of just a few years ago when labor was available in abundance at almost any wage level. Many other wartime problems involving aspects of the agricultural labor supply and requirements and ability to pay given wage levels are rooted in certain pre-war socio-economic conditions of various areas. Drastic changes, now occurring within and outside of agriculture, appear to create a sharp cleavage between the known conditions of the past and the unknown conditions of the future. Hence a clearer view of the whole problem of wages and wage workers in agriculture should be afforded by an examination of current and historical developments.

This report will begin with a review of certain structural aspects of agriculture as an industry, so as to delineate the sector of the agricultural economy that is primarily concerned with the employment and wages of hired farm workers. Succeeding chapters will present information on the Nation's hired farm workers, the agricultural wage structure, and wages as a factor in the costs of agricultural production. The course of movement of farm wage rates and earnings of farm laborers will be examined in the light of associated conditions in agriculture and industry and an appraisal will be given of long-time and recent trends in agricultural wage conditions. Special aspects of wartime farm wage problems will next be considered. The report concludes with an examination of some of the problems involved in formulating policies aimed at retaining or advancing during post-war years the recent gains achieved by farmers and wage workers.

Chapter 1

THE AGRICULTURAL INDUSTRY AND ITS EMPLOYING SECTOR

The character and magnitude of an industry's wage problems are to a considerable extent conditioned by the structural organization of the industry. Because of the preponderance of the family-enterprise unit in the structure of agriculture in the United States, an analysis of agricultural wages is essentially a study of economic conditions within only a special sector of the agricultural industry and the interrelationship between this sector and the rest of the agricultural economy. Although rigid lines of demarcation cannot be drawn, the sector of the agricultural economy which is importantly affected by problems of employer-employee relationships needs to be delineated. Some of the important structural characteristics of the agricultural industry and its component parts are described in this chapter.

Agriculture stands apart from all other major industries in many respects, the basic one arising from its distinctive operations in producing living things--plants and animals--and deriving products directly from them. Patterns of agricultural production are continuously being modified by the interplay of changing physical, biological, technological, and economic factors. The production process itself is affected by factors of soil types, climate, rainfall, pests and diseases, and the development of new or improved varieties of crops or livestock, as well as by the variable economic factors of prices and production costs. The growth processes impose a time-table of labor demands which the farmer cannot easily modify. The farmer is thus dependent upon many more factors beyond his control than is the nonagricultural entrepreneur.

Agriculture differs greatly from all other industries in the number and dispersion of its establishments. Even such widely distributed industries as retail and wholesale trade and service establishments of all types do not begin to approach in number of establishments agriculture's 6 million farms scattered throughout the whole breadth of the country. For example, the Census showed that in 1939 there were approximately 1,970,000 separate establishments engaged in retail and wholesale trade and about 650,000 service establishments. Manufacturing establishments in all industries numbered only 184,000. 1/

In fact, the 6,097,000 units in 1940, which qualified as farms by Census definitions, represented not far from twice as many establishments as were to be found in all other private industries and pursuits combined. 2/ The fact that agriculture in the United States is essentially an industry of small unit

1/ Manufacturing establishments with a value of products in 1939 of \$5,000 or more. Earlier Censuses indicated that when coverage was extended to all manufacturing establishments with a value of products of \$500 or more, the number was increased by about one-fourth.

2/ The Census total of establishments in manufacturing, trade, services, construction, and mining was approximately 3.2 million. In addition there were approximately 348,000 producing oil and gas wells.

operations, carried on by millions of widely scattered, independent establishments, has important effects on the volume of production, degree of competition, existence of trade or labor organizations within the industry, and on other aspects more relevant to production than to wage problems.

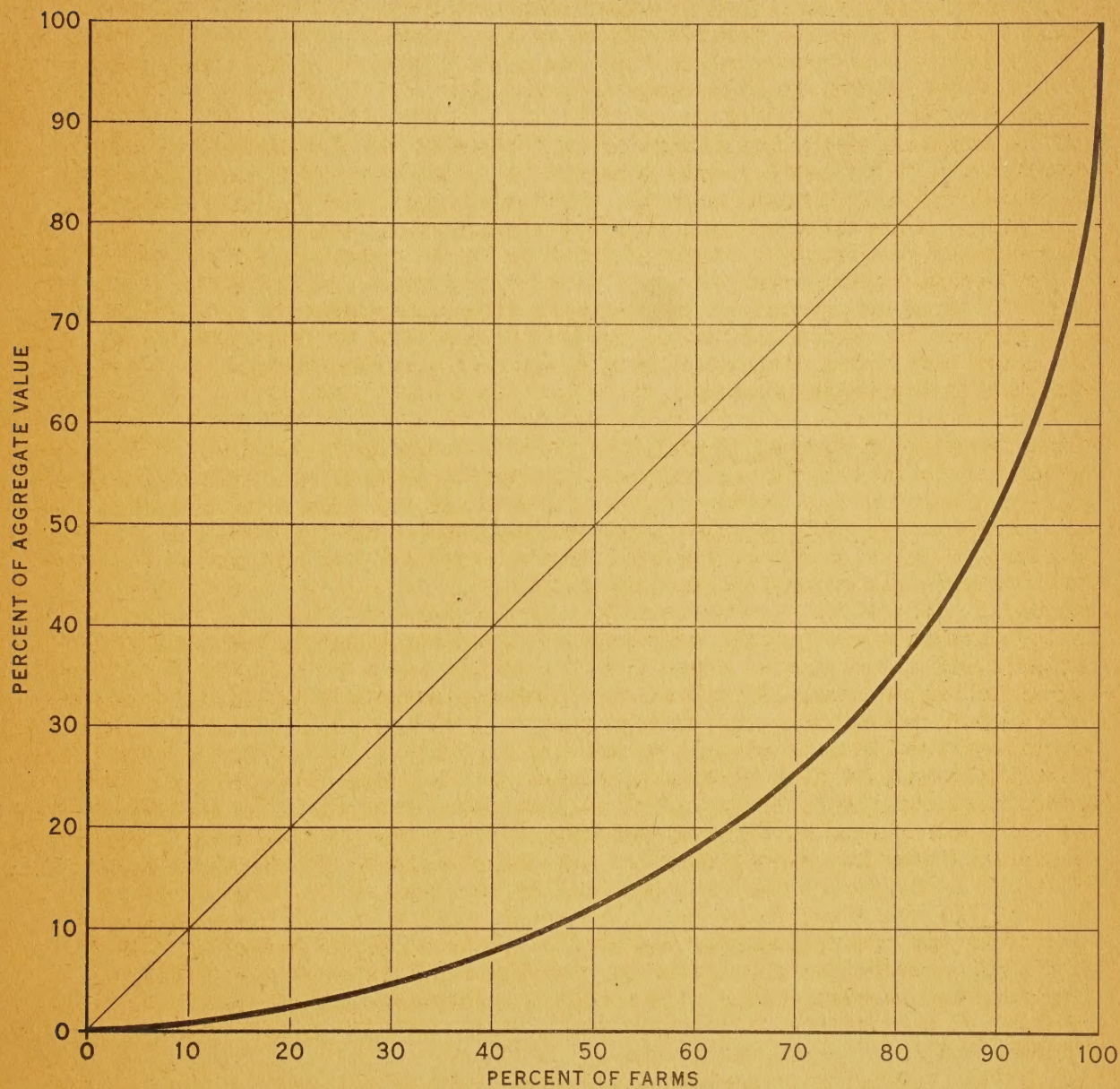
The distribution of farms among size groups is a structural aspect of prime importance in the study of agricultural wage problems. The basic and predominant organization of farms as family enterprises means that wage workers are found more frequently and are employed in greater numbers and for longer periods on farms which in their scale of operations exceed the ability of the operator and his family to perform all of the work required at the times of the year when needed. A corollary of this is that only a minority of all farm operators employ any hired workers even for a limited period during the year. This does not mean that no family-sized farms hire labor, but that generally the greater the degree of dependence on hired labor, the more likely is the farm to be of a scale of operations larger than the average size farm of the particular type. 3/ The distribution of farms among size groups also reveals that many enterprises which the Census classifies as "farms" can hardly be considered as productive enterprises when judged directly by their value of production or indirectly by their land, equipment, and other production resources

Farms by value of products.—The best single measure available of the differences in size of enterprise of agricultural establishments is the total value of annual output, as shown by the Census figures on value of the farm products sold, traded, or consumed at home during the year. 4/ The value of output combines in a single measure an evaluation (under existing price conditions) of the results secured from the utilization of all input factors—land, labor, and capital—each of which taken alone is only a partial measure of size of operations. In agriculture, as in other industries, there are a great many small-scale establishments and a much smaller number of larger establishments, with the latter producing a very substantial part of the industry's total output of products. The extreme unevenness of the distribution of the total value of products on farms of different sizes of enterprise is shown in figure 1. Since the scale of operation is here indicated by the gross

3/ As machinery and capital can substitute for labor to some degree, individual farms of a given type and size may use quite different amounts of hired labor. However, when dealing with large numbers of farms in each of the different size classes, the individual farm differences in the amount of hired labor used average out to a considerable degree.

4/ Of the 6,096,799 farms in 1940, 5,968,755 or 97.9 percent reported some production during 1939. In addition to these "classified" farms, there were 39,542 farms which did not report on value of production and 83,502 which reported no farm products sold, traded, or used by farm households. Throughout this chapter percentage distributions by value groups of farms are based on classified farms rather than on all farms.

CUMULATIVE DISTRIBUTION OF TOTAL VALUE OF AGRICULTURAL PRODUCTS, UNITED STATES, 1939



DATA FROM 1940 CENSUS OF AGRICULTURE

FIGURE 1

value of production, the distribution indicates primarily the extent of concentration of resources used in agricultural production rather than the distribution of net income from farming. Large numbers of farms are found in the smallest sized groups, with 56 percent of the farms in 1939 producing less than \$750 worth of products per farm and only 5 percent of the farms producing in excess of \$4,000 worth of products per farm.

Theoretically, a situation of an absolutely equal distribution of resources used and gross income received in agriculture would be represented by the straight line instead of the curve shown in figure 1. The extent to which the actual curve departs from the straight line indicates the degree of unevenness of the existing distribution. The curve described by the distribution in 1939 of the total value of agricultural production, for example, indicates that the lower 50 percent of the Nation's farms produced only 12 percent of the total value of products sold, traded, or consumed by farm households, while the upper 10 percent of the Nation's farms produced 47 percent of the total value of agricultural products.

Production composition.--The scale of farming operations is such an important consideration in agricultural wage problems that other characteristics of agriculture as an industry will be examined in relation to a classification of farms by value of products. Next the composition of agricultural production in terms of major groups of products may be examined for differences to be found among farms of different sizes (table 1).

In some respects, the contrasts are great between the composition of agricultural production of farms with a very low value of products and those with very high values. In the lowest value-of-products group, farm products used by farm households make up more than half of the total value of production, whereas on the farms of highest income the proportion is negligible. Livestock, which makes up less than 7 percent of the value of products on the lowest group, increases progressively until it reaches approximately 40 percent on farms with \$50,000 or more in value of production per farm. Production of vegetables, fruits and nuts, and horticultural specialties begin to comprise sizeable fractions of the total value of output only on farms in the highest gross income classes. In contrast, dairy and field crops comprise larger proportions of total value of production on farms in the middle range of income than on the very high or very low income farms. Poultry and poultry products make up a fairly constant proportion of agricultural production throughout the income range.

The grouping of all field crops into a single category hides some important differences in types of crops on farms in the different value-of-products classes. Such specialized products as cotton, tobacco, sugarcane, sugar beets, and potatoes are included in the category of field crops, as are corn, small grains, hay, etc. Cotton and tobacco would no doubt show a heavier concentration on farms in the lower half of the gross income range, whereas the sugar crops, grains, and potatoes would show a relatively greater concentration on farms in the higher gross income range.

Table 1.-Distribution of total value of agricultural products by type of product, for value groups of farms, United States, 1939 1/

[illegible]

1/ 1940 Census of Agriculture. For all types of farm products other than those by farm households, the value figures relate to products sold or traded.

The subsistence character of many of the farms in the smallest value-of-output classes is indicated by the very large proportion of the value of their output consumed at home. Production for home use on the lowest value groups of farms does not represent some essentially different commodities, as the products consist of the other types shown, being mainly poultry; dairy products, livestock, some field crops, vegetables, and fruits. There is a rapid falling off in the relative importance of the value of home-consumed products from the very smallest farms to farms having progressively larger values of output. Even on farms with as low a gross value of output as \$400 to \$600, more than 60 percent of the value of their production was sold. This indicates that many small farms engage in commercial production although on a very small scale. Many of these are cotton and tobacco farms.

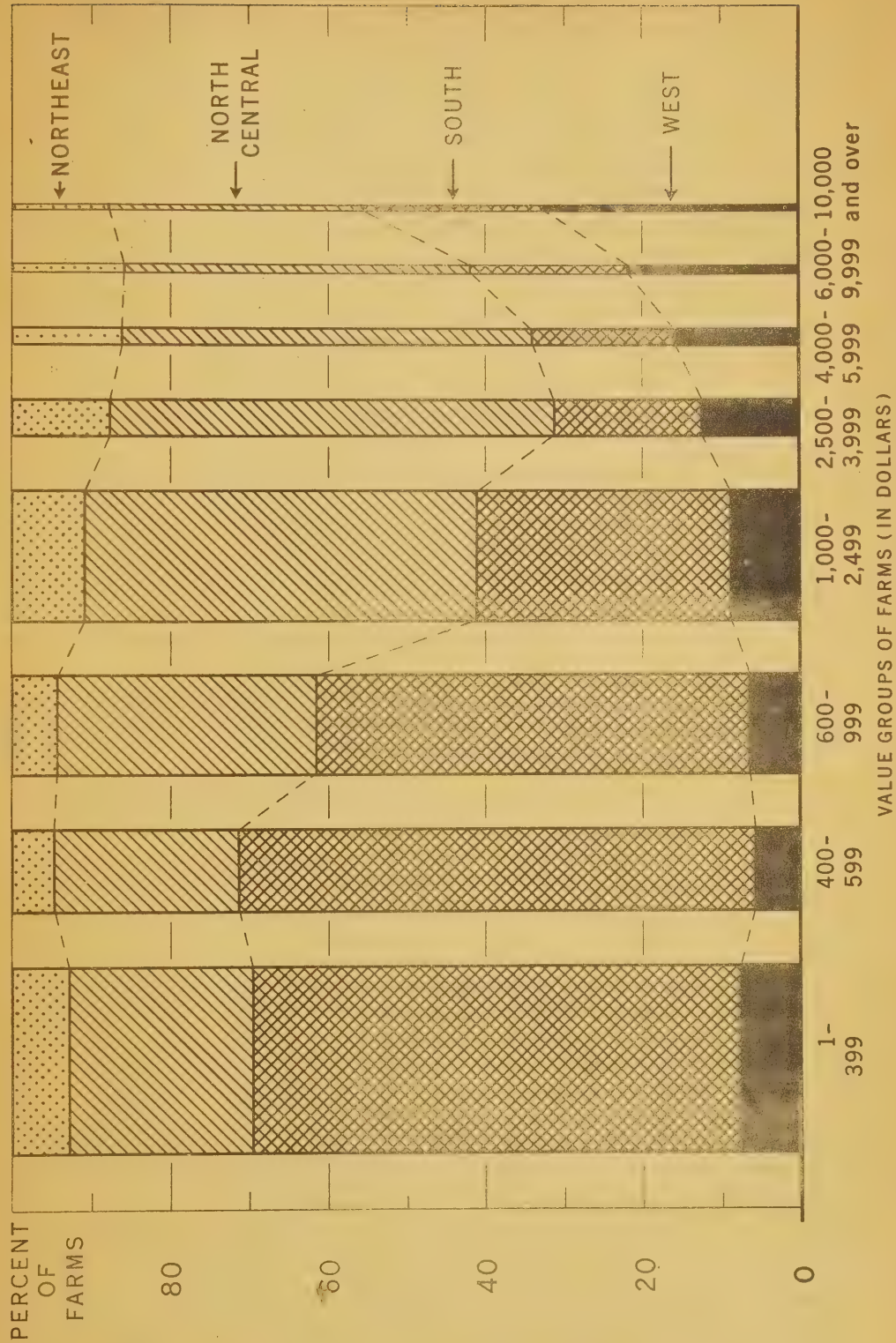
The fact that sales of livestock comprise progressively larger fractions of the value of products on farms that have higher gross incomes is only partly due to the greater frequency of large-scale livestock operations. In part it arises from the Census practice of crediting each farm with all sales made during a year, regardless of the length of time the livestock were on the farm. Thus the rapid turn-over of animals fed for only a short period on certain types of livestock farms tends to cause a large proportion of these farms to be classified in the higher value groups and tends to exaggerate the importance of livestock in the production composition of this group.

Contrasts between the very highest and the very lowest gross income groups are marked, but for the great middle range of farms between income limits of \$1,000 and \$20,000 per farm, shifts in composition of production from one end of the range to the other are generally very gradual. For farms in this range, which produced 68.5 percent of all agricultural production and 72.4 percent of marketed products in 1939, the average distribution of production by type of products is rather similar. Individual farms in this gross income range or in any part of the range would, of course, vary widely in composition of their production, but for any given value group of farms, the percentage composition would be very similar to that for other value groups within the range.

Farms with value of products of \$20,000 or more in 1939 show considerable differences in average composition of production from farms in the middle range. However, the differences are not great enough to mean a fundamentally different pattern of production. For example, livestock takes first place over field crops, but the latter is the second most important source. Vegetables, fruits and nuts, and horticultural specialties become more important, but these three combined represent less than one-fourth of all production. Therefore, the average production composition on this highest group of farms retains some essential similarity to that on the middle range of farms, even though a large proportion of the individual farms in this group are highly specialized.

Regional distribution of farms.--There are decided regional differences in the proportion of the region's farms falling in the several value-of-production classes. Broad regional differences are shown in figure 2, with the width of each bar proportional to the number of farms in the specified value

REGIONAL DISTRIBUTION OF FARMS IN SPECIFIED VALUE GROUPS, UNITED STATES, 1939



U. S. DEPARTMENT OF AGRICULTURE

group. The South had more than one-half to two-thirds of the country's farms in the classes producing less than \$1,000 worth of products in 1939, approximately one-third of the farms which produced \$1,000 to \$2,500 worth of products, and about one-fifth of the farms in the over \$2,500 class. Eighty percent of all of the farms in the South produced less than \$1,000 worth of products, with 41 percent producing less than \$400 worth. Farms in the North Central States were concentrated more heavily in the higher income groups. From one-fourth to one-third of the country's farms in the value-of-products groups under \$1,000 were to be found in the North Central States, but from 44 to 56 percent of the farms in the \$1,000 to \$10,000 classes were in this region. Nearly one-third of the farms in the over \$10,000 class were also in the North Central States. In 1939 this region had approximately half of its farms in the under \$1,000 value-of-products class, one-third in the \$1,000 to \$2,500 class and another 10 percent in the \$2,500 to \$4,000 class.

The Northeastern States, consisting of the New England and Middle Atlantic geographic divisions, had about the same number of farms as were to be found in the Western States, consisting of the Mountain and Pacific geographic divisions. There was also a striking similarity between these two widely separated regions in the distribution of farms among the several value-of-products classes. The percentages of all farms in the several value classes located in the Northeastern States and in the Western States were about the same in each value class as shown in figure 2 up to the two highest value groups--the \$6,000 to \$10,000 and the \$10,000 and over. The Western States had a larger proportion of the farms in the two highest income groups.

Farms by major source of income.--Some of the major differences in the predominant types of production carried on by the farms of each region are shown in table 2. There is a large proportion of subsistence farms in the South, with the major source of income in 1939 indicated as products of the farm consumed by the farm households. Forty-one percent of the farms in the South were in this category as compared with 33 percent in the Northeast, 22 percent in the North Central States, and 24 percent in the Western States. Of the farms where some marketed products formed the major source of income, field crops ^{5/} represented the major source of the largest proportion of farms in the North Central, South, and West, while dairy products represented the major source on the largest proportion of farms in the Northeast. Other regional differences in the principal types of products are indicated in table 2. For example, poultry and poultry products, fruits and nuts, vegetables, and horticultural specialties have relatively greater importance in the Northeastern and Western States as contrasted with the situation in the North Central and Southern areas.

Farms by tenure.--A cross classification of farms in the different value-of-products classes by tenure of the operator ^{6/} shows for 1939 relatively small differences in the distribution of farms within the two main tenure groups--

^{5/} It should be kept in mind that there are important regional differences in the types of products included in the field crop category.

^{6/} In Analysis of Specified Farm Characteristics for Farms Classified by Total Value of Products, Bur. Census, Bur. Agr. Econ., and Farm Sec. Adm. June 1943

Table 2.-Distribution of farms by major source of income, United States and major regions, 1939 1/

Major source of income	United States			Northeast			North Central			South			West		
	:Percent:			:Percent:			:Percent:			:Percent:			:Percent:		
	:age of:			:age of:			:age of:			:age of:			:age of:		
	Farms	total	Percent	Farms	total	Percent	Farms	total	Percent	Farms	total	Percent	Farms	total	Percent
	Number			Number			Number			Number			Number		
All sources	5,968,755	100.0		471,761	100.0		2,049,191	100.0		2,957,294	100.0		190,509	100.0	
Livestock	726,162	12.2		15,336	3.3		508,649	24.8		133,453	4.5		68,724	14.0	
Dairy products	619,006	10.4		145,193	30.8		352,068	17.2		65,168	2.2		56,577	11.5	
Poultry and poultry products	217,570	3.6		53,466	11.3		81,710	4.0		48,637	1.6		33,757	6.9	
Other livestock products	20,251	0.3		1,985	0.4		5,066	0.2		6,793	0.2		6,407	1.3	
Field crops	2,186,986	36.7		55,377	11.7		599,516	29.3		1,409,542	47.7		122,551	25.0	
Vegetables	80,116	1.3		16,828	3.6		19,938	1.0		29,817	1.0		13,533	2.8	
Fruits and nuts	133,685	2.2		14,679	3.1		19,379	.9		34,957	1.2		64,670	13.2	
Horticultural specialties	18,950	.3		5,558	1.2		5,363	.3		4,186	.1		3,243	0.7	
Forest products	23,300	.4		5,794	1.2		4,239	.2		10,489	.4		2,778	.5	
Farm products used by farm households	1,942,729	32.5		157,545	33.4		452,063	22.1		1,214,252	41.1		118,269	24.1	

1/ 1940 Census of Agriculture

full owners ^{7/} and tenants other than sharecroppers. The proportions of farms operated by full owners and by tenants (exclusive of sharecroppers) were not greatly different in the low, middle, and high gross income classes. For the country as a whole, there was in fact a somewhat higher percentage of farms operated by full owners in the value-of-products classes of under \$400 than of farms operated by tenants (other than sharecroppers). This situation prevailed in all major regions of the country. Farms in the value-of-products classes of over \$1,000 included 32 percent of all farms operated by full owners, but 36 percent of all farms operated by tenants (other than sharecroppers). The higher proportion of farms operated by owners in the lowest gross income classes reflects the many part-time and semi-retired owner-operators in these groups and many subsistence farming units with inadequate resources.

Farms operated by part owners and managers, which comprised only 10.1 and 0.6 percent respectively of all farms, were distributed to a greater extent among the higher value-of-products classes than the other tenure groups. As part owners are operators who rent some land in addition to that they own, and as managers are usually found on farms with relatively large-scale operations, there is a preponderance of these tenure groups in the middle-to-high range of gross income, especially in the case of managers. Nearly two-thirds of the sharecropper units were in the value-of-products classes of under \$600, compared with 60 percent of all operators other than sharecroppers in the South.

It is apparent that, with the exception of sharecroppers, the numerically important tenure groups, full owners and nonsharecropper tenants, show no marked differences in size of farming operations, and probably no marked differences in the amount of hired labor utilized. More striking differences would probably be shown between farms operated by owners and tenants if data were available to classify such farms on a net income basis or to classify their operators with respect to level of living or degree of security.

Distribution of workers.—The great number of establishments in agriculture means that its workers are more dispersed than in any other industry. Fewer than 1 million out of the 6.1 million farms had more than two workers in March 1940, with the average number of family and/or hired workers reported for all farms being only 1.59 workers per farm. From Census data on the number of farm workers reported in the last weeks of September 1939 and March 1940, the 1939-40 annual average number of farm workers on the several value-of-products classes of farms has been estimated. This distribution is shown in table 3 with the distribution of total value of agricultural production shown for comparison. An undue proportion of the Nation's farm workers is on farms in the lower value-of-production classes. They are predominantly family workers, however, whereas hired workers tend to be concentrated on farms in the higher value-of-production classes.

^{7/} In accordance with Census terminology, the tenure class "full owners" means only that the operator does not rent any part of the farm he operates. However, the farm of the full owner may or may not be mortgaged.

Table 3.-Distribution of farm workers in comparison with distribution of total value of products,
United States, 1939

Value group	Value of products:		Farm workers 2/			
	: sold, traded, or:	:	:	:	:	:
	: used by the	:	:	:	:	:
	: farm household 1/:	Total	Percent	Family	Hired	
	Percent	Percent	Percent	Percent	Percent	
All classified farms	100.0	100.0	100.0	100.0	100.0	
\$1 - 599	10.9	35.8	42.5	13.9		
600 - 999	10.4	17.2	19.1	11.1		
1,000 - 2,499	27.8	25.9	25.8	26.2		
2,500 - 3,999	15.0	8.5	7.0	13.2		
4,000 - 9,999	18.7	7.8	4.7	18.0		
10,000 and over	17.2	4.8	0.9	17.6		

1/ 1940 Census of Agriculture.

2/ Annual averages estimated from Census data and Bur. Agr. Econ. estimates of farm employment

Productivity of workers. 8/ Productivity of labor on farms of different sizes of enterprise shows marked differentials. For all farms reporting some production in 1939, the mean value of total agricultural production per farm worker is estimated at \$772 (table 4). When allowance is made for the smaller amount of time put in by part-time operators, and for the smaller amount of time and the lesser work capacity of older operators and of unpaid family workers (who include a substantial number of women and younger persons), a "man-equivalent" employment figure can be derived for the value classes of farms. The man-equivalent employment figure provides a more valid basis for comparing worker productivity on the several value groups of farms. 9/

The value of output per worker increases sharply and progressively on farms in the successively higher value-of-production classes (figure 3). On a "man-equivalent" basis, the production per worker for all value groups of farms was \$951 in 1939, but the figure varies all the way from \$82 per worker in the lowest value group of farms to \$2,850 or about 35 times as much in the highest group of farms.

The larger production per worker on farms in the higher value groups is associated with better resources and larger outlays per worker of capital and other nonlabor costs. When an estimate of all production expenses except labor costs is subtracted from the total value of production, the resulting figure when related to employment provides a measure of the net returns for all labor, capital, and management per worker. The average for all value groups of farms in the United States was only \$476 during 1939, but on the farms with a value of products of \$10,000 or more the net returns for all labor, capital, and management were \$1,605 per worker. 10/ The last two columns in table 4 indicate the net returns for labor and management alone, after an allowance for returns on capital investment has been deducted, these returns averaging \$501 per farm and \$364 per "man-equivalent" worker in 1939.

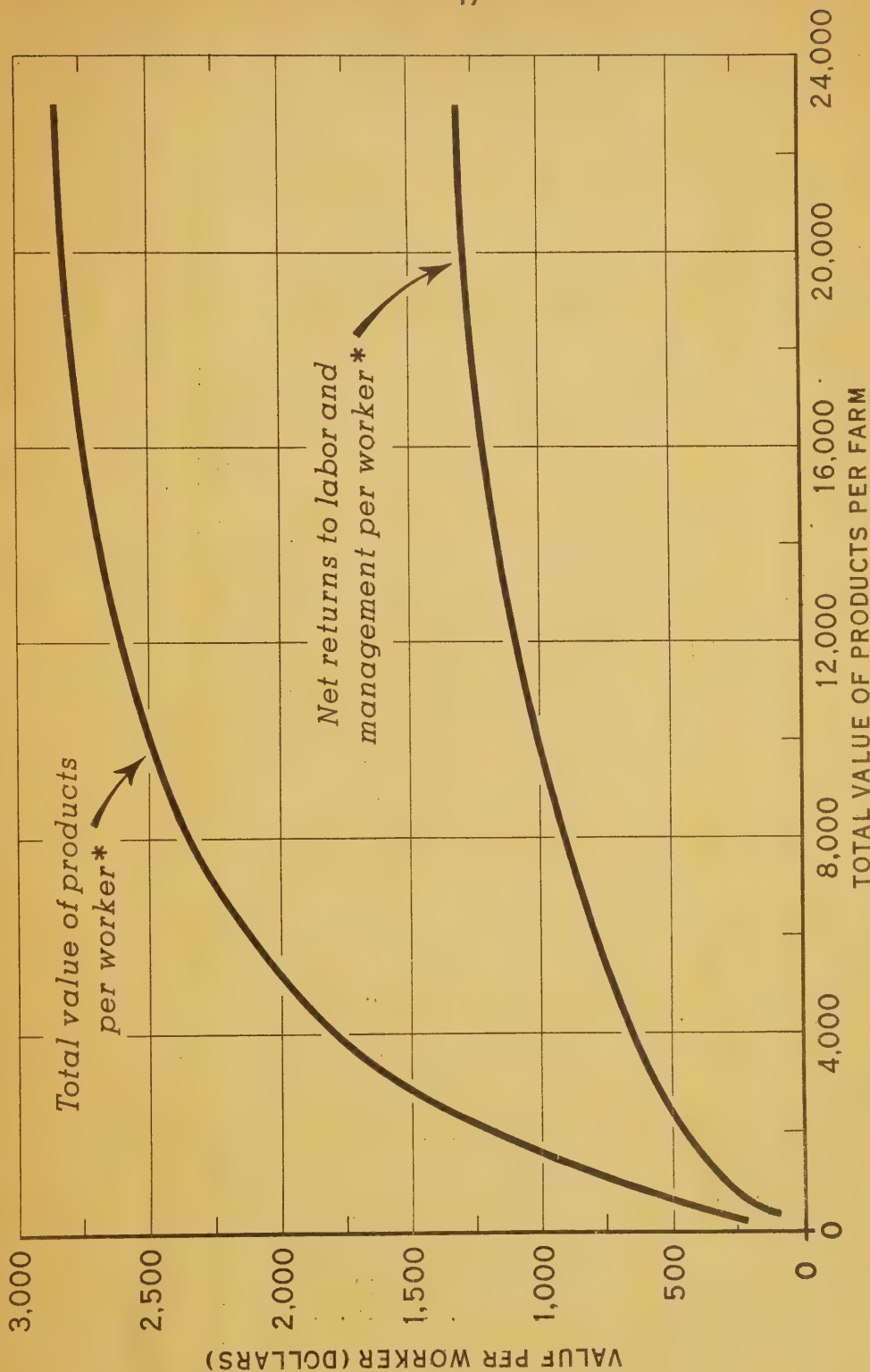
The much greater productivity of labor employed on farms in the higher value-of-production classes has important implications for wage rates. The employment of the great majority of hired workers on the higher income and better equipped farms means on the average a greater output per hired worker in terms of gross or net value of production than the per worker output in the case of farms which are manned entirely by family labor.

8/ For a full discussion of the differentials of agricultural labor productivity presented here and for similar estimates by major geographic divisions, see Differentials in Productivity and In Farm Income of Agricultural Workers by Size of Enterprise and by Regions, Bur. Agr. Econ., August 1944. The productivity measures in this section relate to all farm workers, both family and hired.

9/ Because unpaid family workers and part-time or semi-retired operators comprise a greater proportion of the workers on the lower income farms, the adjustment to a man-equivalent basis reduces the employment on such farms by a greater percentage than the employment on the higher income farms.

10/ Based on "man-equivalent" workers.

GROSS AND NET RETURNS PER FARM WORKER, FOR FARMS CLASSIFIED BY TOTAL VALUE OF PRODUCTS, UNITED STATES, 1939



*VALUE PER "MAN-EQUIVALENT" WORKER
ESTIMATES BASED ON DATA FROM 1940 CENSUS OF AGRICULTURE AND B. A. E. PARITY INCOME ESTIMATES

Table 4.-Total value of products, net returns for all labor, capital, and management, and net returns for all labor and management per farm and per farm worker, by value-of-products classes, United States, 1939 ^{1/}

Value group	: Net returns for all labor, : Net returns for all									
	: Total value of products 2/					: capital, and management : labor and management 4/				
	:		: Per "man-"		:	: Per "man-"		:		:
	Dollars	Dollars	Per farm:equivalent"	Per farm:equivalent"		Dollars	Dollars	Dollars	Dollars	
: Per farm: worker : farm worker 3/: Per farm: farm worker 3/ : Per farm: farm worker 3/										
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
All classified farms	1,309	772	951	656	476	501	364			
\$1 - 99	57	60	82	-71	-102	-115	-164			
100 - 249	173	151	200	35	41	-7	-8			
250 - 399	320	241	315	153	150	104	103			
400 - 599	491	332	424	266	230	205	177			
600 - 749	669	414	525	376	295	297	233			
750 - 999	865	514	641	466	345	362	269			
1,000 - 1,499	1,222	679	837	625	428	475	325			
1,500 - 1,999	1,726	894	1,087	848	534	639	402			
2,000 - 2,499	2,229	1,086	1,298	1,077	627	820	477			
2,500 - 3,999	3,111	1,364	1,599	1,512	777	1,166	600			
4,000 - 5,999	4,806	1,685	1,926	2,269	909	1,751	702			
6,000 - 9,999	7,438	2,097	2,311	3,650	1,125	1,857	881			
10,000 and over	22,989	2,755	2,850	12,948	1,605	10,572	1,311			

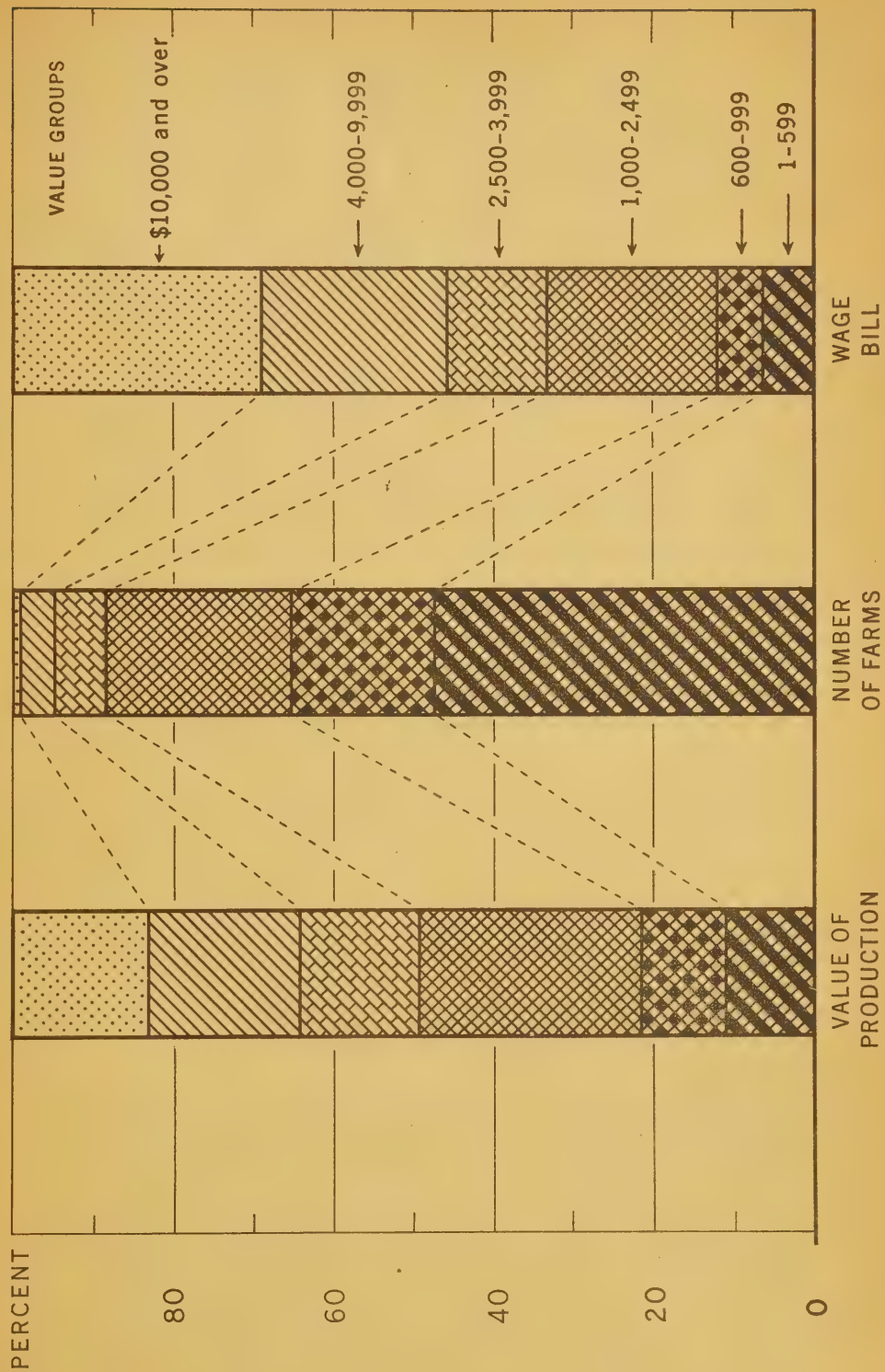
1/ Estimates from Differentials in Productivity and In Farm Income of Agricultural Workers by Size of Enterprise and by Regions, Bur. Agr. Econ., August 1944.

2/ Value of farm products sold, traded, or used by farm households. This excludes rental value of dwelling and Government payments.

3/ An approximation to the value of production or returns per worker who in work capacity and labor time input equals that of the average farm operator under 65 and not working off the farm in excess of 100 days a year.

4/ Net returns after deducting all production expenses and after allowing a return on invested capital, including the investment in livestock and machinery.

DISTRIBUTION OF TOTAL VALUE OF AGRICULTURAL PRODUCTION, FARMS, AND CASH FARM WAGE BILL BY VALUE GROUPS OF FARMS, UNITED STATES, 1939



DATA FROM 1940 CENSUS OF AGRICULTURE

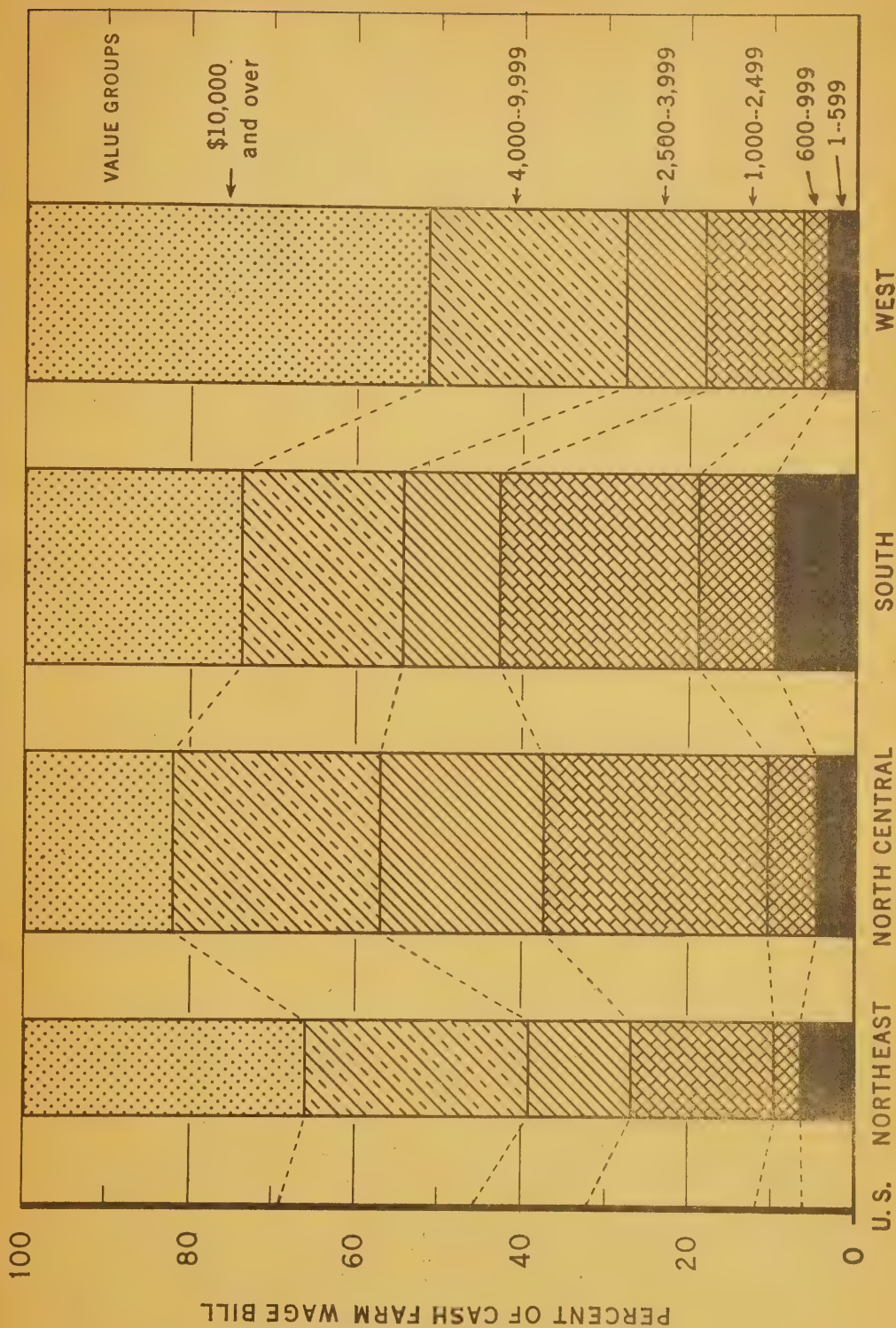
The employing sector.--The relevance to wage problems of the various classifications of data presented for farms by value-of-production classes is demonstrated strikingly in figure 4, which shows the distribution by value-of-production classes of: (1) total value of production, (2) number of farms, and (3) the cash farm wage bill. The share of the wage bill paid on farms in the higher value-of-production classes is far greater than the proportion of farms in those classes and moderately greater than the proportion of production on those farms. Nearly 90 percent of the Nation's farm wage bill in 1939 was paid on farms which individually had a value of products of more than \$1,000, although farms with gross value of production of more than \$1,000 made up about 35 percent of all farms. But this 35 percent of farms accounted for only 79 percent of all agricultural production in 1939.

The importance of farms as employers of hired labor increases progressively in successively higher value-of-production classes. Farms in the highest class--the .10 percent which had a total value of production of \$10,000 or more per farm--accounted for more than 30 percent of the entire cash farm wage bill. More than 20 percent of the wage bill was paid on farms in the next highest value-of-production class--those with total value of production per farm of \$4,000 to \$10,000. Thus more than half of the cash wage bill was paid on farms in the value-of-production classes of more than \$4,000 per farm. In these classes are only 5.2 percent of the Nation's farms, and not all of these reported expenditures for hired labor. Actually, 54.4 percent of the 1939 cash farm wage bill was paid on only 266,000 farms in these value-of-production groups, or on only 4.5 percent of all farms in the country.

Distributions of the cash farm wage bill by value-of-production groups of farms are shown for each of the major regions of the United States in figure 5. In general, the pattern is similar to that already shown for the United States as a whole, although the concentration of farm wage payments on farms in the highest value-of-production class (\$10,000 and over per farm) is noticeably greater in the West and in the Northeast, and somewhat less in the North Central region. Conversely, the South has a larger share of its wage bill paid on farms with gross value of production of less than \$1,000 than do the other major regions, but then the South has a far larger share of its farms in the lower value-of-products groups.

Census tabulations are not available for precisely the sector of farms which would be characterized as those on which hired labor is important. The tabulations by total value of products are the best approximation available, although these are more satisfactory for purposes of analysis of wage relationships in the highest classes, where a large proportion of all farms are hiring farms, than in the middle range. Because 85 percent of the farms in the value-of-production classes of \$4,000 or more hired labor in 1939, and because they accounted for nearly 55 percent of the wage bill, statistics for this value group of farms may be used to characterize the most important group of the employing sector. In successively lower value groups, the percentage of farms hiring labor was progressively smaller, hence the statistics for the group of farms are less appropriate for describing the employing farms within the group.

DISTRIBUTION OF CASH FARM WAGE BILL BY VALUE GROUPS OF FARMS, UNITED STATES, AND MAJOR REGIONS, 1939



WIDTH OF EACH BAR IS PROPORTIONAL TO AMOUNT OF WAGE BILL IN EACH REGION
DATA FROM 1940 CENSUS OF AGRICULTURE

For example, although a fifth of the wage bill was paid on farms in the \$1,000-\$2,499 group, only 55 percent of the farms in this group paid any wages at all; hence the averages for the value group may not be satisfactory in reflecting the situation of those farms in the group that hired labor.

The identification of the farms whose operators are the principal employers of hired labor as almost wholly in the upper gross income range, and of their increasing importance as hirers of wage labor in the progressively higher gross income groups has very important implications for the types of economic data and analyses that are appropriate in a study of farm wage problems. ^{11/} Farms that customarily hire any considerable amount of labor are at an average net farm income level much higher than the average for all farms in the United States. Wage expenditures are an infrequent and small or nonexistent item on a majority of all farms. The purpose of presenting some of the structural aspects of the agricultural industry in relation to gross value of production per farm has been to identify the "hiring" farms as a specialized sector of the agricultural economy with which this study is mainly concerned.

Wartime Changes in the Agricultural Structure

There have been marked changes in agriculture in the United States during the 4 years since the last inventory of the Nation's farms was provided by a Census of Agriculture. Food requirements of our armed forces and our allies, along with increased civilian buying power, have called for a large increase in crop acreages and livestock numbers. With the favorable weather and high yields of the last few years, the volume of agricultural production has reached unprecedented levels. Meanwhile claims of the armed forces and war industry for manpower have reduced the farm labor supply and the farm working force, necessitating increased efficiency in the utilization of farm labor. Although information on the extent of these changes and related shifts in the structure of the agricultural industry is not available in terms of the fairly precise distributions which would be afforded by a Census, the direction of the changes and certain indications of their magnitude are clearly evident.

The number of farms in the United States has decreased since 1940. As cropland harvested and livestock numbers have increased, the average size of farm enterprises has expanded. Because the decrease in number of farms is due largely to the migration of low income, marginal, and part-time farmers to better employment opportunities, there is reason to believe that the numbers

^{11/} Any averages relating to income, expenses, wages, employment, size of enterprise, etc. for all farms in the United States are inappropriate as averages for the hiring farms. For example, each of the 4 million farms in the lower value-of-production classes, which together account for only 12 percent of the wage bill, has just as much effect in determining the all-farm average as does each of the much smaller number of farms that are at all importantly concerned with farm wages as a production expense.

of farms in the lower value-of-production classes have decreased more than proportionately to their numbers.

These changes, together with a high level of prices received by farmers, have led to marked increases in gross and net income per farm. Between 1941 and 1942, it has been estimated that the median net cash income of farm operators from farming rose from \$440 to \$980. ^{12/} Although the larger farms had much greater increases of income in terms of dollars, the change in distribution of farms by total value of products or by net income was generally in the direction of being relatively more favorable to the lower income groups. For example, the upper 10 percent of the farmers in 1941 received 45 percent of the net cash income from farming whereas in 1942 they received only 37 percent.

With agricultural production increasing and the number of all farm workers decreasing, the output per farm worker has shown decided increases during the last few years (table 5). Agricultural production per worker for the country as a whole has averaged 25 percent greater in 1940-43 than in 1935-39 and 67 percent greater than in 1910-14. ^{13/} These most recent gains in farm labor productivity are a continuation, and perhaps an acceleration, of a long-time trend. Over the last three decades the gain in productive efficiency of agricultural labor shows an impressive record. ^{14/} As a result, 14 percent fewer farm workers produced 44 percent more food and fiber in 1940-43 than in the 1910-14 period for a national population 40 percent greater. Underlying these gains in labor productivity is a record of progress in farm technology including, besides mechanization, improved varieties and strains of crops and livestock, more effective control of plant and animal disease and pests, improved cultural and farm management practices, and in very recent years fuller utilization of the available working force. Some factors have operated in the direction of lowering labor productivity as less suitable land was brought under cultivation and as erosion took its toll, but these factors have been far more than offset by those operating to raise labor productivity.

Although the various type-of-farming areas have shown some irregularity due to drought, pests, and in some areas rapid introduction of improved varieties of important crops, the upward trend in production per worker has been general in all areas of the United States except in the Eastern Cotton area. Increases have been especially marked in the Corn area, both as a result of increased mechanization and of the introduction of hybrid corn. Production per worker in the Corn area in 1940-42 averaged 71 percent greater than in 1910-14. Gains of more than 50 percent in output per worker during the period have also occurred in the Western Dairy area, the Range area, the Northwestern

^{12/} Dorothy S. Brady and Margaret Jermon Hagood, "Income of Farm Families," The Agricultural Situation, August 1943, pp. 9-11.

^{13/} On the basis of the Bur. Agr. Econ. indexes of agricultural production and farm employment.

^{14/} See figure 22, Chapter 9.

Table 5.-Agricultural production, employment and productivity indexes, U. S. and major type-of-farming areas, 5-year averages, 1910-39 and single years 1940-1943 1/

(Index numbers 1924-1929 = 100)										
Area and index	: 1943:	: 1942:	: 1941:	: 1940:	: 1939:	: 1938:	: 1937:	: 1936:	: 1935:	: 1934:
<u>United States</u>										
Index I										
Production	129	126	114	111	101	98	100	93	88	84
Employment	90	92	91	93	96	97	100	100	103	106
Output per worker	143	137	125	119	105	101	100	93	85	79
<u>United States</u>										
Index II										
Production	-	123	110	108	102	98	101	91	90	89
Employment	-	92	91	93	96	97	100	100	103	106
Output per worker	-	134	121	116	106	101	101	91	87	84
<u>Corn Area</u>										
Production	-	139	127	119	111	100	101	97	98	94
Employment	-	92	91	93	93	94	99	104	110	116
Output per worker	-	151	140	128	119	106	102	93	89	81
<u>Eastern Dairy</u>										
Production	-	118	110	108	105	100	99	104	106	107
Employment	-	96	95	98	96	96	99	106	115	126
Output per worker	-	123	116	110	109	104	100	98	92	85
<u>Western Dairy</u>										
Production	-	136	124	123	108	100	100	94	84	77
Employment	-	39	39	91	95	97	100	93	98	99
Output per worker	-	153	139	135	114	103	100	96	86	78
<u>Middle Eastern</u>										
Production	-	116	105	107	103	96	101	99	101	94
Employment	-	91	92	96	101	99	100	103	106	111
Output per worker	-	127	114	111	102	97	101	96	95	85
<u>Eastern Cotton</u>										
Production	-	103	90	104	108	101	102	91	117	131
Employment	-	86	84	87	93	96	99	107	113	118
Output per worker	-	120	107	120	116	105	103	85	104	111
<u>Delta Cotton</u>										
Production	-	128	111	107	118	96	104	79	84	85
Employment	-	91	94	96	99	100	101	94	96	100
Output per worker	-	141	118	111	119	96	103	84	88	85

(Continued)

Table 5.--Agricultural production, employment and productivity indexes, U. S. and major type-of-farming areas, 5-year averages, 1910-39 and and single years 1940-43 1/ (Continued)

(Index numbers 1924-29 = 100)										
Area and index	: 1943:	: 1942:	: 1941:	: 1940:	: 1935-:1939	: 1930-:1934	: 1925-:1929	: 1920-:1924	: 1915-:1919	: 1910-:1914
<u>Western Cotton</u>										
Production	-	92	84	90	81	93	100	85	78	85
Employment	-	87	86	88	92	95	100	96	95	97
Output per worker	-	106	98	102	88	98	100	89	82	88
<u>Small grain</u>										
Production	-	123	161	85	71	90	100	93	84	74
Employment	-	91	84	90	91	97	100	97	98	100
Output per worker	-	135	120	94	78	93	100	96	86	74
<u>Range Area</u>										
Production	-	127	124	112	104	99	102	86	80	65
Employment	-	99	99	95	102	104	100	97	93	88
Output per worker	-	128	125	118	101	95	102	89	86	74
<u>Northwestern</u>										
Production	-	135	133	126	119	111	103	87	76	62
Employment	-	115	113	113	110	104	100	97	92	87
Output per worker	-	117	118	112	108	107	103	90	83	71

1/ Index I for the United States is based on the Bur. Agr. "con. indexes of volume of agricultural production and of annaul average farm employment. The production per worker was obtained by dividing the index of production by the index of employment. Index II for the United States and for each type-of-farming area utilizes the index of agricultural production prepared by the National Research Project, WPA, for the years 1909-35 (Raymond G. Bressler, Jr., and John A. Hopkins, Trends in Size and Production of the Aggregate Farm Enterprise, WPA National Research Project, Report No. A-6, July 1938) with extension through 1942 as made by the Bur. Labor Stat. Although trend and year-to-year changes are generally about the same in Index I and Index II, the actual differences observed are due partly to the difference in method of index construction used by the Bur. Agr. Econ. and the National Research Project. The former utilized prices in the base period for weighting the individual commodities, while the latter utilized labor requirements weights in terms of man-hours per unit of production. The two indexes also differ in the treatment of production used for feed or seed. The states included in the several areas are as follows: Corn Area, Ill., Ind., Iowa, and Ohio; Eastern Dairy, Conn., Mass., N. Hamp., N.Y., Pa., and Vt.; Western Dairy, Mich., Minn., and Wisc.; Middle Eastern, Ky., Md., N.C., Tenn., Va., and W. Va.; Eastern Cotton, Ala., Ga., and S.C.; Delta Cotton, Ark., La., and Miss.; Western Cotton, Okla. and Texas; Small Grain, Kans., Mont., Neb., N. Dak. and S. Dak.; Range area, Ariz., Colo., N. Mex., Nev., Utah, and Wyo.; Northwestern area, Idaho, Oregon, and Wash. The following States are not included in any of the areas, but are included in the United States total: Maine, R. I., N.J., Del., Mo., Fla., and Calif.

area, and in the Small Grain area. Greater gains in farm labor productivity occurred during the present war than in the World War I period, but generally areas which recorded large gains in the first war have been the ones to show the greater increases in this war. This was particularly true in the Corn area, the Western Dairy area, and the Small Grain and western areas.

In general, recent changes in the size of the farm working force, number of farms, and income per farm or per farm worker have been in the direction of correcting partially for some of the long-standing maladjustments in agriculture. The higher income level for farmers and wage workers has brought a greater proportion of both groups out of the substandard category. The reduction in the pressure of farm population upon the agricultural resources of the country has brought the man-land ratio into a more favorable balance. Farm wage rates have been favorably affected not only by the more prosperous condition of the agricultural industry as a whole, but also by the removal of the surplus rural labor supply of unemployed and underemployed persons.

Chapter 2

WAGE WORKERS ON FARMS

Many more people work for wages on farms than is commonly supposed from the current employment figures. How many there are, who they are, where they live or come from, and what economic and social status they have--all these are important questions in understanding agricultural wage conditions. For it is these workers and their dependents whose income and living levels are directly affected by the changes in farm wage rates.

Numbers of Hired Farm Workers

During the last 5 years, the number of hired workers employed on farms of the United States in the various months of the year has averaged close to 2.5 million, or about one-fourth of the total farm employment. The number at work changes greatly during the course of any year from a low of approximately 1.6 million in January to a peak of about 3.2 million in early July or October. Nearly half of all the hired farm workers in the United States are to be found in the three southern geographic divisions; this proportion holds both for peak and slack months of the year. Because of labor turn-over, even the highest monthly employment figure for the Nation as a whole greatly understates the number of different persons who work for wages on farms at some time during the year. In addition, the time of peak farm employment varies in the different regions and on different types of farms so that there is no one month or week in which an employment count would get all persons who work for wages during the year.

A special survey of farm labor utilization during 1943 indicated that the total number of different persons working on farms during the course of a year was more than 50 percent greater than the average for the 12 months of the year. ^{1/} Since the ratio of the total number of different workers to the annual average number is greater for the farm workers who are not operators, an annual average hired farm employment of 2.5 million probably involves as many as 4 million persons who work for wages on farms during at least some part of the year. When to this number are added their dependents, we find a total of some 6 or 8 million persons dependent wholly or partially for their income on agricultural wages.

The relative importance of hired workers varies in the several geographic divisions of the country. They make up a larger proportion of the farm working force in the Western and Northeastern States than they do in the South and in the North Central States (table 6). In the Pacific States, where relatively large-scale

^{1/} The Farm Working Force of 1943, Bur. Agr. Econ., March 1944.

Table 6. -Hired farm workers, United States and major geographic divisions, annual average and quarterly dates, 1943

Area	Annual average : Jan. 1			April 1			July 1			Oct. 1		
	:Percent:	: of :	:Percent:	:Percent:	: of :	:Percent:	:Percent:	: of :	:Percent:	: of :	:Percent:	: of :
	:Number:	: total :	:Number:	: total :	:Number:	: total :	:Number:	: total :	:Number:	: total :	:Number:	: total :
	: of :	: farm :	: of :	: farm :	: of :	: farm :	: of :	: farm :	: of :	: farm :	: of :	: farm :
	:hired :	:employ-:	:hired :	:employ-:	:hired :	:employ-:	:hired :	:employ-:	:hired :	:employ-:	:hired :	:employ-:
	:workers:	: ment :	:workers:	: ment :	:workers:	: ment :	:workers:	: ment :	:workers:	: ment :	:workers:	: ment :
	000	Pct.	000	Pct.	000	Pct.	000	Pct.	000	Pct.	000	Pct.
United States	2,406	23.4	1,556	19.0	1,875	20.1	2,986	25.4	3,104	26.0		
New England	82	32.9	52	25.1	62	27.8	111	39.5	106	38.4		
Middle Atlantic	203	32.8	114	23.5	149	26.9	275	37.0	275	39.1		
East North Central	266	18.9	186	15.1	212	15.9	332	21.7	312	21.3		
West North Central	286	17.8	183	13.3	219	14.6	358	19.4	324	19.5		
South Atlantic	463	23.7	324	22.1	397	22.6	541	23.5	599	25.9		
East South Central	261	15.8	163	13.1	217	14.4	279	15.2	389	17.9		
West South Central	430	24.5	301	21.5	333	21.6	549	26.6	574	26.2		
Mountain	142	32.3	80	23.3	101	25.4	185	38.2	175	36.0		
Pacific	273	47.2	153	36.6	185	38.0	356	53.1	350	51.9		

farming and the production of special crops distinguish the agriculture of the area, hired workers made up almost half (47 percent) of the 1943 annual average number of all farm workers. In other parts of the United States hired workers comprised from one-sixth of the 1943 average number of farm workers in the East South Central States to one-third in the New England, Middle Atlantic, and Mountain States.

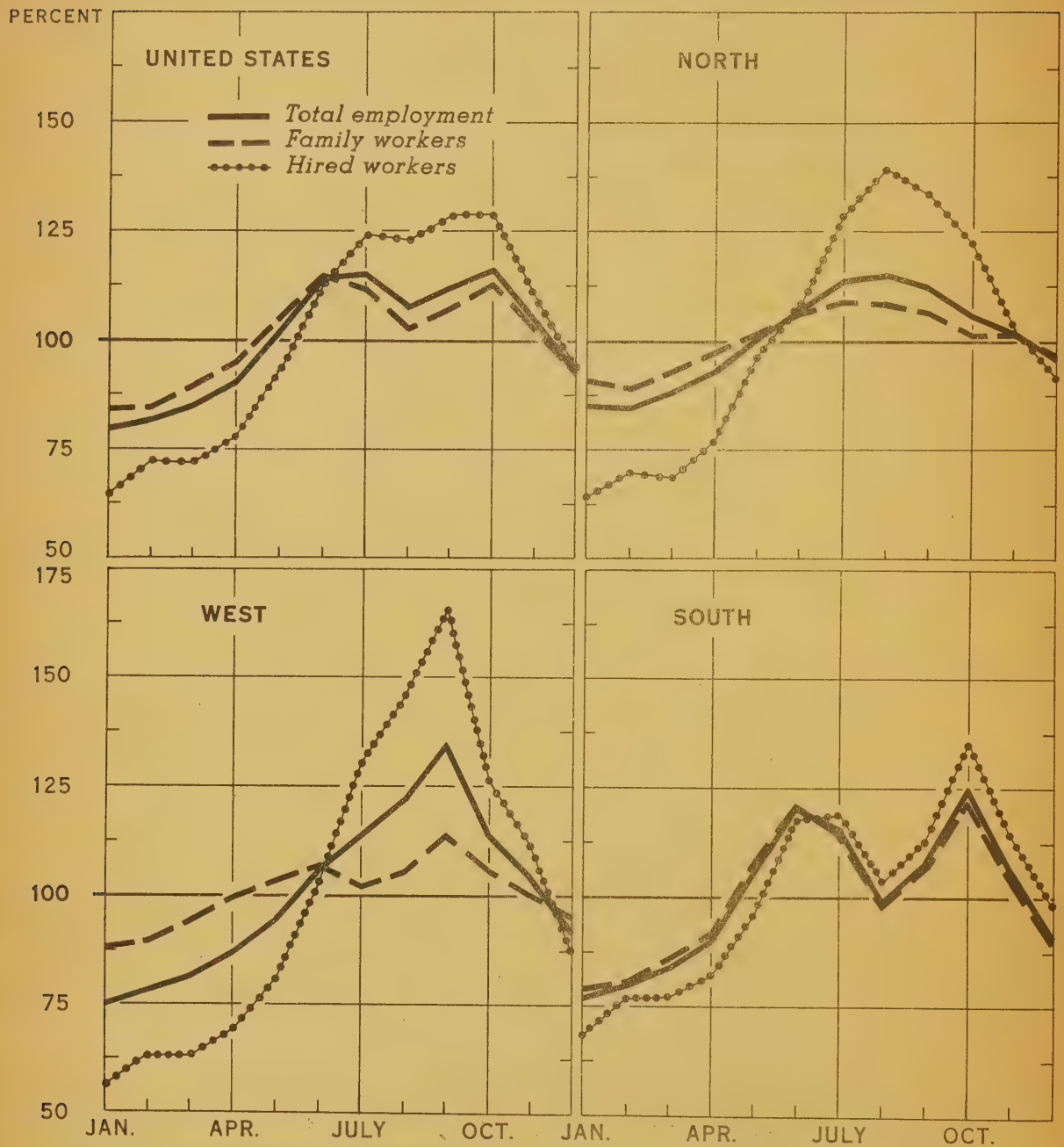
Not only does the number of hired workers in the various areas increase sharply with the season, but also the percentage they comprise of total farm employment. There is a greater seasonal increase in hired workers than in family workers, in all geographic divisions and the increase is especially noticeable in the Pacific States. Characteristic patterns of seasonal changes in the employment of family and of hired farm workers in the three major regions are shown in figure 6.

Types of Hired Workers

The great seasonal changes in numbers of workers hired on farms means that a great many farm laborers do not have steady employment at farm work throughout the year and need to supplement their earnings by other kinds of jobs during the slack season. Many aspects of farm wage problems are accentuated for the group of seasonal farm laborers who work for varying periods on different farms. Except in periods of full employment, like the present, many of the seasonal farm laborers are unemployed for some part of the year. For this group of seasonal workers, the length of employment available in a year is a factor as important as the rate of pay, if not more so, in affecting their annual earnings. Seasonal hired farm laborers are found more frequently and in greater numbers on fruit and vegetable, cotton, sugar beet, and on other farms with high labor-requiring crops. Many of them work in areas and on farms where the commercialization and to some extent the industrialization of agriculture have proceeded furthest. Practices and conditions of employment peculiar to the large-scale specialized farming operations found in California and in other States bear little resemblance to those traditionally associated with the personalized relations of the operator of a family-size farm and his hired man. Within the seasonal group, the migratory workers have additional problems of transportation, temporary housing, routing of their migration to coincide with changing needs for laborers, and in many cases the housing and care of their families.

Precise information is not available on the numbers of hired farm workers falling into the broad classes of regular and seasonal workers, or within the seasonal group into migratory laborers and permanently resident seasonal laborers. Because the lines of demarcation between the groups are not sharp, and because workers change from one group to another within a year, over-all estimates are necessarily very rough. It seems probable that in pre-war years there were around 1.0 to 1.5 million hired workers, each of whom was rather regularly employed on one farm for most of the year, and some 2.0 to 3.0 million other persons who at some time of the year might be

SEASONAL PATTERN OF FARM EMPLOYMENT, UNITED STATES AND MAJOR REGIONS, 1943*



* MONTHLY EMPLOYMENT OF EACH CLASS OF WORKER AS PERCENTAGE OF ITS 12-MONTH AVERAGE. B. A. E. ESTIMATES.

FIGURE 6

classified as seasonal hired farm workers. Of the seasonal group, some 0.5 million to 1.0 million were migratory workers who moved from one area to another following the harvests, and 1.5 to 2.0 million were nonmigratory seasonal workers who worked on farms for varying periods during the year. 2/

Composition of Hired Workers

No Census or survey taken at any one date provides information on all the different persons who work for wages on farms in the course of a year. For all persons actually working as hired farm laborers in the last week of March 1940 and for the unemployed whose last occupation was that of a hired farm worker, the Census provides information on various characteristics. In that week approximately 2.2 million persons were classified as hired farm workers, including 1.9 million actually employed and 0.3 million experienced farm laborers seeking work. This group of 2.2 million includes all the year-round and most of the other "regular" hired workers who work less than the entire 12 months, but includes only a very small part of the seasonal hired workers, both migratory and nonmigratory.

Although many women work on farms in the summer and fall, the year-round or regular hired farm working force is largely composed of men. In March 1940, 95 percent of all hired farm workers were males (table 7). Wartime demands for manpower have brought a decided increase in the numbers of women working on farms in all months of the year, but most of the increase in female employment has been in family rather than hired workers. On the average, hired farm workers are younger than workers in other occupations. Half of the employed male farm laborers were below 30.3 years of age in 1940 as compared with a median age of 38.3 years for employed males in all occupations and a median age of 46.6 years for farmers and farm managers. For both males and females, the heaviest concentration of farm laborers was in the ages from 18 to 35, more than 55 percent of all hired farm laborers falling in this group.

Approximately three-fourths of all hired farm laborers in March 1940 were white (table 8). However, Negroes made up about 24 percent of all farm laborers though they comprise only about 15 percent of the entire farm population. In the case of female farm laborers, more than 70 percent were Negroes and most of these were in the South. Japanese, Chinese, and all other races together totaled only 36,000, or less than 2 percent. The group of white males was by far the largest of any--comprising more than 1.6 million of the entire group of 2.2 million.

Because a great many seasonal farm workers were not yet at work on farms at the time of the last Census, the March 1940 figures may understate the proportion of Negroes among hired farm workers. Seasonal employment of hired

2/ This break-down of the hired farm working force relates to the total number of different individuals who work for wages during the course of a year, and not to an annual average or the number working in any given month.

Table 7.- Age and sex of employed and unemployed farm laborers (wage workers) and farm foremen, March 24-30, 1940 ^{1/}

Age	Total		Males		Females	
	Number	Percent	Number	Percent	Number	Percent
All ages	2,227,783	100.0	2,112,901	100.0	114,882	100.0
14 - 17	146,490	6.6	133,473	6.3	13,017	11.3
18 - 19	185,000	8.3	174,056	8.2	10,944	9.5
20 - 24	471,018	21.1	449,278	21.3	21,740	18.9
25 - 34	580,226	26.1	553,447	26.2	26,779	23.3
35 - 44	329,930	14.8	310,379	14.7	19,551	17.0
45 - 54	253,123	11.4	239,409	11.3	13,714	12.0
55 - 64	182,842	8.2	176,336	8.4	6,506	5.7
65 - 74	71,676	3.2	69,292	3.3	2,384	2.1
75 and over	7,478	0.3	7,231	0.3	247	0.2

^{1/} 1940 Census of Population, Vol. III, The Labor Force, Part 1, U. S. Summary, Table 65. These figures exclude experienced farm laborers employed on public emergency work.

Table 8.--Race, residence, and marital status of employed and unemployed farm laborers (wage workers) and farm foremen, March 24-30, 1940 ^{1/}

Classification	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Race						
Total	2,227,783	100.0	2,112,901	100.0	114,882	100.0
White	1,663,314	74.7	1,630,813	77.2	32,501	28.3
Negro	525,872	23.7	447,977	21.2	80,895	70.4
Other races	38,597	1.6	34,111	1.6	1,486	1.3
Residence						
Total	2,227,783	100.0	2,112,901	100.0	114,882	100.0
Urban	197,927	8.9	186,196	8.8	11,731	10.2
Rural-nonfarm	475,445	21.3	450,608	21.3	24,837	21.6
Rural-farm	1,554,411	69.8	1,476,097	69.9	78,314	68.2
Marital status						
Total	2,227,783	100.0	2,112,901	100.0	114,882	100.0
Single	1,069,953	48.0	1,029,202	48.7	40,751	35.5
Married, spouse present	935,311	42.0	894,152	42.3	41,159	35.8
Married, spouse absent	83,487	3.7	73,373	3.5	10,114	8.8
Widowed or divorced	139,032	6.3	116,174	5.5	22,858	19.9

^{1/} 1940 Census of Population, Vol. III, The Labor Force, Part 1, U. S. Summary, Tables 59, 62, 67, and 68. These figures exclude experienced farm laborers employed on public emergency work.

workers is not very great during March in the cotton areas of the South where Negroes make up such a large proportion of seasonal farm laborers. Moreover, not many female workers are hired in March and a large majority of all female hired workers are Negroes. Also, many Negro sharecroppers work for wages during parts of the summer and fall, but the number of them working for wages in March would be considerably smaller.

In addition to the basic classifications of age, sex, and race, the Census offers other material which aids in identifying the hired farm laborer group. About 70 percent of the persons classified as hired farm workers by the Census lived on farms, 20 percent in other rural areas--open country, villages, and small towns--and less than 10 percent in cities of 2,500 or more. These percentages relate in large part to the more or less regular workers who would be employed in a month like March. At harvest time there occurs a substantial increase in the number of farm workers whose regular residence is in urban areas. Farm laborers, being younger on the average than most occupational groups, have a much higher proportion of single persons. Almost 50 percent of all male farm laborers in March 1940 were single, as compared with only 25 percent of all employed males. Some 400,000 of these males were living in the operator's household on the farm where they were working, while about 600,000 rural-farm resident farm laborers were married and heads of households themselves.

There is a considerable overlap among the three classes of agricultural workers--operators, unpaid family workers, and hired workers. Sharecroppers and share tenants are customarily grouped with the operator category, although in terms of economic status there is often little difference between these categories and wage workers. Many agricultural workers do not remain in any one of these categories during the course of a whole year, as persons who are operators may also work for wages on other farms, and unpaid family workers may at certain times of the year become paid workers either on the family's farm or on other farms. The amount of this interchangeability among the classes of agricultural workers varies with the season of the year. As wartime conditions have increased the dependence on local labor in most communities, members of farm families have more frequently helped on a paid or exchange basis with the work on neighboring farms. One survey made in May 1942 indicated that 53 percent of the reporting farmers expected to obtain their additional hired workers from farms in the neighborhood. 3/

Some evidence of the shifting between the status of operator and hired laborer is provided by the Census data for March 1940 relating to farm operators who supplement their own farming income by working for wages on other farms for a part of the year. Nearly 175,000 of the employed farm laborers reported that their usual occupation was farmer or farm manager. On the other hand, about 140,000 farmers reported that their usual occupation was paid farm laborer--these probably being operators who depend more on their earnings from wage work on other farms than on income from their own farming.

3/ Farm Labor Report, Bur. Agr. Econ., May 1942.

In addition to the interchangeability to be found over the country between low income farm operators and hired workers within a given year, there is in the South a considerable degree of shifting from hired farm laborer status to sharecropper, and vice versa, from one year to another. During the 1930-40 decade, a considerable part of the net decrease in sharecroppers was probably due to the fact that some plantation landlords found it more profitable to operate their land with **wage labor than with sharecroppers**. Often the same individuals remained on the plantations, living in the same houses and doing the same kind of work, but being paid on a wage rather than on a share basis. Since 1940 the reduction in the supply of farm labor has apparently led to some shifting back to the sharecropping system as a means of obtaining greater stability in the labor force.

The shortness of the season for many hired farm workers who live in rural areas leads them to seek nonfarm jobs for parts of the year. The types of nonfarm jobs available to them vary in different localities. Work in textile mills, sawmills, lumber camps, mines, construction and in certain manufacturing and food processing establishments represent the principal occupations.

In addition to the farm laborers who regularly live on farms, either in the operator's household or in a separate household, and those who live in nearby rural or urban centers, there are the migratory workers who come into areas at times of seasonal needs which cannot be met by the local supply of labor. These are the workers who follow the crops in the principal fruit and vegetable areas and those who follow certain migratory routes in connection with the grain harvest in the Midwest or with the **cotton** harvest in the South. Although numerically they are and have been much less important than the resident farm laborers, their numbers have at times been swelled by the effects of depressions, drought, and accelerated mechanization of farming operations.

The agriculture of important specialized areas, as in Arizona and California, has come to be heavily dependent upon migratory sources of labor. The problems of migratory farm laborers, though basically similar to those of other farm laborers, have sometimes been accentuated by the presence among them of distinct race, nationality, or cultural groups and by the greater degree of insecurity and differential treatment attaching to their migratory status.

Recent Changes in Composition of Hired Farm Workers

Since the outbreak of the war, the composition of hired farm workers has changed in several respects. Most marked has been the altered age composition as many young men left farm work for industrial jobs or the armed forces. There were between 400,000 and 500,000 fewer men aged 18-37 working for wages on farms in early April 1944 than in the last week of March 1940, a decrease of over 35 percent, but their loss has been partially offset by increases in other age groups. Table 9 shows the great changes in age composition which have occurred. The age groups 14-17, which comprised only 6.1 percent of all wage and salary

Table 9.-Change in percentage composition of wage and salary workers employed in agriculture, 1940-44 ^{1/}

Age groups	March 24-30, 1940	April 2-8, 1944
	Percent	Percent
14 years of age and over	100.0	100.0
14 - 17	6.1	13.3
18 - 19	7.8	7.7
20 - 24	20.9	14.7
25 - 34	26.7	18.2
35 - 44	15.4	17.8
45 - 54	11.4	13.1
55 - 64	8.1	9.3
65 and over	3.6	5.9

^{1/} Bureau of the Census. Data for 1940 from 1940 Census, Population, The Labor Force, (Sample Statistics) Occupational Characteristics. Estimates for April 1944 from Monthly Report on the Labor Force.

workers on farms in 1940, now makes up 13.3 percent of the entire group. Similarly, each age group above those subject to military service comprises a higher percentage now than in 1940 with persons 65 years of age and over increasing from 3.6 percent in 1940 to 5.9 percent in 1944.

For certain other changes in composition there are no precise numerical estimates. In the summer and fall, women are working on farms for wages in greater proportions, although their increasing importance is not reflected in the figures for a month like April. In some cases unpaid family workers have shifted to paid work on other farms. Other unpaid family workers have become paid workers on the family farms, as increased farm incomes made possible the payment of a regular wage to a son or daughter, and the availability of nonfarm jobs often made this necessary as an inducement to remain on the family farm. On the other hand, sons who were formerly paid for their work on the family farm have shifted in some cases to partnership or tenant status which removes them from the category of hired workers.

The proportion nonfarm residents comprise of hired farm laborers has not changed substantially during the war years, because of a balancing of several changes. The number of migratory workers had decreased substantially, as they took better paying full-time industrial jobs or entered the armed forces, or were deterred from migrating by transportation difficulties. To replace some of the former migratory workers, various special groups have been used--workers imported from Mexico, Jamaica, and the Bahamas, twilight armies of towns-people, soldiers on special leave, persons on vacations, high-school youths, college girls, and others. But in general, a greater proportion of the farm work has been done by local persons, either rural residents or persons from nearby small towns.

In the South, there appears to have been a reversal of the 1930-40 trend from sharecroppers to hired laborers, as plantation owners or managers have granted sharecropper status to former hired laborers to assure a more continuous labor supply. ^{4/} In all parts of the country, fuller employment of farm workers has resulted in other types of internal changes in the composition of hired farm workers. Some former seasonal workers have now become regular workers, used to replace the farmers' sons who went into industry or the armed forces. Some former migratory workers now find it unnecessary to seek farm work far from their place of origin, for they can find it nearby. Small-scale operators who were not fully employed on their own farms have increasingly worked for wages on other farms in the neighborhood. In these and other ways underemployment of farm workers has been reduced since the outbreak of the war.

Status of Farm Laborers

The status of the group of people working as farm laborers in the United States today represents the result of three quite different historical streams

^{4/} Elco L. Greenshields, "Farm Tenure Changes," The Agricultural Situation, September 1943, p. 23.

in the development of our agriculture. Perhaps of greatest importance was the apprentice wage-hand--often the son of a neighboring farmer--who, in theory at least, saved his wages until he could climb to the next rung of the agricultural ladder which eventually led to ownership of a farm. Throughout the Northeastern and North Central States, this type of regular hired man whose status could approach that of the farmer's has been for generations the predominant type of farm laborer.

In the South the prototype of the sharecropper and the hired farm laborer was the slave laborer, whose status was infinitely lower than that of the contemporary hired farm worker in the North. In a regional culture importantly affected by slavery, there was in the years before the Civil War a carry-over of disdain for those who did manual labor, resulting in a very low status for white as well as for Negro farm laborers.

The third important type of farm laborer has appeared more recently with the introduction of so-called industrialized operations into agriculture, that is, farming operations of a highly commercialized nature, conducted on a fairly large scale, and employing relatively large numbers of workers. The seasonal laborers hired in gangs on large commercial farms are almost completely culturally segregated from their farmer-employers. In between the status of the hired laborers who work on large-scale farms and the hired man who works alongside the farmer are various gradations. The status differentials between the farmer-employer and his workers are fairly wide on commercial farms of moderate size.

The status of the hired man has declined with the increasing difficulty in moving up the agricultural ladder. The status of the Negro farm laborer has improved since slave days, but is still affected by the vestiges of peonage not always left behind with a shift one rung up the ladder to sharecropper status. The status of the hired worker groups employed on large-scale farms is far below that of organized labor groups in nonagricultural industries. Thus the hired farm laborers of the present have, to a large extent, a culturally inherited status which has not been determined solely by the low wage rates and earnings of farm laborers. Their status and wage rates are inter-related, with each affecting the other. For example, in times of manpower scarcity the low status of the hired farm worker means that farmers suffer an additional disadvantage in competing for laborers with nonagricultural employers.

Although hired farm laborers are on the bottom rung of the agricultural ladder, the line of cleavage in status between low-income farmers and farm laborers is blurred by the overlapping of the two groups. Considerably greater differences in status exist between the large and small farmers or between the regular, resident farm laborers and some groups of migratory workers than between the small farmers and many hired farm laborers. Moreover, in many farming areas, the low wages and annual earnings of the farm laborer families, which stand in sharp contrast to those for nonagricultural wage workers, are received by families where the contrast with earnings of the neighboring families of small farm operators is not nearly so great. Consequently the differential in status may be less than the figures on earnings and income presented later, will suggest. Nevertheless, the several million people who depend primarily on earnings from farm labor have long been severely disadvantaged in comparison with almost any other occupational group in our economy.

Distribution of Hired Farm Workers

More than half of the farmers in the United States are not affected by wage problems, since they carry on all their farming throughout the year with family labor alone. Farms reporting any expenditures at all for hired farm labor during the year 1939 were only 37.1 percent of all farms. The number of farmers who were hiring labor in the 2 weeks reported by the last Census were 893,000 or 14.6 percent in March and 1,110,000 or 18.2 percent in September (table 10). These figures indicate that probably somewhat less than one-fifth of the farms of the country are, on the average, hiring labor at any given time during the year. But there are marked regional differences in the farm employment pattern as shown in table 10.

A striking feature in the farm employment structure is the heavy concentration of a large number of hired workers on a very small proportion of all farms. In March 1940, almost a quarter of a million workers were hired on the 7,667 farms which had a total value of products of \$10,000 or more in 1939 ^{5/} and which reported 10 or more hired workers. Thus one-tenth of one percent of all farms, or slightly less than one percent of the farms reporting hired labor, had nearly 13 percent of all hired workers.

Only limited data are available from the 1940 Census regarding the number of farms which hire specified number of workers. For the 740,000 workers hired by the month, who are a substantial majority of all regular hired workers, such information is available. Of the 500,000 farms that were employing labor on a monthly basis in March 1940, 77.1 percent hired only one such laborer. Slightly more than half (52.2 percent) of the 740,000 monthly hands were working on these farms. Comparison of the figures with similar 1935 Census information for all hired workers--those hired by the month, day, or week, or on piece rates--indicates that there is somewhat less concentration of the monthly workers than for all hired workers, even though the 1935 data relate to a January date when a large proportion of all hired workers would be the regular workers. Yet even for the monthly workers, there was considerable concentration of many hired workers on a very few farms in March 1940. More than 200,000 farm laborers hired by the month were on the 41,000 farms which hired three or more laborers by the month. Thus 28.0 percent of all such workers were on 8.2 percent of all farms hiring monthly labor. In January 1935, 39.4 percent of all hired farm laborers were on farms which hired three or more laborers. Farms with this number of hired workers comprised 11.1 percent of all farms reporting any hired laborers in January 1935.

Only fragmentary data are available to indicate differences with respect to frequency of hiring labor among the several types of farms within a region or State. Sample data for a few States for June 1942 suggest some of the

^{5/} Census figures on total value of products include the value of products from the farms sold, traded, or used by the farm household. They do not include Government payments.

Table 10. Percentage of farms hiring labor and reporting wage expenditures, United States and major geographic divisions, for specified periods ^{1/}

Area	:March 24-30, 1940		:Sept. 24-30, 1939		:Percentage
	: Percent	: Average	: Percent	: Average	: of farms
	: of farms	: number of	: of farms	: number of	: reporting
	: reporting	: hired workers	: reporting	: hired workers	: expenditures
	: hired	: per farm	: hired	: per farm	: for hired labor
	: workers	: reporting	: workers	: reporting	: during 1939
	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
United States	14.6	1.96	18.2	2.81	37.1
New England	20.1	2.05	24.8	3.05	39.1
Middle Atlantic	21.9	1.80	28.3	2.53	43.2
East North Central	15.5	1.46	20.5	1.77	36.9
West North Central	13.5	1.45	17.6	1.91	42.1
South Atlantic	17.2	2.29	19.5	2.83	35.7
East South Central	9.9	1.96	11.5	2.79	23.0
West South Central	12.6	2.34	15.4	4.39	35.8
Mountain	16.0	2.30	22.2	3.43	47.9
Pacific	13.3	2.94	22.2	5.10	53.8

^{1/} 1940 Census of Agriculture.

differences to be found among types of farms. Among the farms sampled in New York State, the dairy and livestock farms showed a higher percentage hiring two or more workers than in the case of farms where the major source of income came from field crops (table 11). In Colorado, on the other hand, the production of sugar beets, beans, potatoes, and other relatively high labor-requiring field crops results in a higher proportion of farms with these products having two or more workers in midsummer than of the livestock or fruit farms in the State. Within the same type-of-farm class, there are also considerable differences among the States in the proportion of farms hiring two or more workers. Thus New York with its larger average-size dairy enterprise shows a substantially higher proportion of dairy farms with two or more hired workers than in the case of Nebraska or Oregon.

The 1942 sample study indicated that in midsummer, when the nature of farming operations in different States varies greatly according to the predominant farm type, the differences between areas in the percentage of hiring farms with three or more hired workers are much more pronounced than in a month like March. In New York and Nebraska, the percentages are 11.7 percent and 9.7 percent—not greatly in excess of the percentages of hiring farms with three or more monthly hired workers in March 1940 (7.0 percent for New York and 5.4 percent for Nebraska). In Arkansas and Colorado, however, and to a lesser extent in Oregon, the summer field-crop operations cause a far greater proportion of hiring farms to have as many as three hired workers. Sugar beet work in Colorado accounts in the main for 32.4 percent of hiring farms in the sample with three or more hired workers, while cotton chopping and hoeing in Arkansas is largely responsible for the fact that 37.5 percent of the hiring farms sampled in the States had three or more hired workers employed in June 1942.

The net effect of wartime changes in the farm employment structure has generally tended to increase the degree of concentration of hired workers. Available information indicates that the net decrease in number of hired farm workers has taken place mainly on family-size farms, while the larger farms have been better able to retain or replace their hired workers. ^{6/} On many farms where one hired worker was regularly employed before, the family members are now managing to do all the work with only very occasional hired labor. On others, where there was no regular hired worker, but where one or more workers were hired for periods during the season of highest labor demands, family members are managing to handle all of the work often by working more hours a week or month.

Heavy migration from farms has led in many cases to consolidation of units, so that in general the decrease in number of farms together with the wartime expansion in crop acreage and livestock numbers during the last 4 years has

^{6/} The Agricultural Manpower Situation, Bur. Agr. Econ., Nov. 1942 and Labor and Other Factors Influencing Dairy Production in the Los Angeles Milkshed, November 1942, Bur. Agr. Econ., February 1943.

Table 11. Percentage of farms reporting 2 or more hired workers by type of farm, for selected States, June 1942 ^{1/}

Type of farm	New	Nebraska	Colorado	Oregon	Arkansas	North Carolina
	Percent	Percent	Percent	Percent	Percent	Percent
All types reported	15.4	8.5	25.1	12.9	20.5	21.4
Livestock	17.3	9.3	22.6	11.4	14.6	26.8
Dairy	15.2	6.7	--	6.7	19.7	39.6
Field Crops	13.9	9.1	34.2	13.2	27.7	25.6
Fruit	--	--	22.8	--	--	--
Family living	9.6	3.0	5.5	2.4	7.6	11.0

^{1/} Based on replies received from farmers to special questionnaires used by the Bur. Agr. Econ. during the months of January-June 1942. Because of sample limitations the relative difference among the types of farms within the States are believed to be more indicative than the actual frequencies.

resulted in an increase since 1939 in average size of operations, on the farms that were already fairly important employers of hired labor. As there has not been enough farm machinery available to offset the higher labor requirements on farms that have expanded operations it is probable that although the number of hired workers is smaller now than in the pre-war years, the proportion of them hired on a relatively small number of farms may be even greater. Thus in analyses of the effects of wartime changes in farm wage rates on agricultural production costs, income, or other aspects, where comparisons are made with totals or averages for all farms in the United States, it must be borne in mind that, as in pre-war years, costs of hired labor in any appreciable amounts relate to only a small group of the Nation's farmers, even though they are very important from the standpoint of production.

STRUCTURE OF FARM WAGE RATES

Hired farm workers do not generally receive the "average" wage rate. Individually they get different rates, some far above and some far below the average for all workers. In all industries wage rates differ in amount and in method of payment among establishments, but in agriculture, where the "establishments" are widely dispersed individual farms, the possibilities of variation in wage rates and methods of payment are much greater. Even the State average farm wage rates at a given current date show nearly as great a range of difference between the Southern and Western States as there has been between the highest and lowest annual average farm wage rates for the country as a whole during the last 77 years of recorded information.

When farm-to-farm variations in wage rates within the separate 48 States are considered together with the variations in rates paid individual workers on the same farm, the national pattern of wage variations becomes very complex. This complicated pattern of variations in wage rates received by hired workers on the Nation's farms is referred to here as the "structure" of farm wage rates.

The extent and nature of the variations in wage rates among individual workers and farms have received less attention than the average farm wage rates. Most of these variations are obscured when we deal with an average wage rate for so large and heterogeneous an area as a whole State. They can be perceived best only when the distribution of workers at various wage levels above and below a given average is examined. Moreover, many specific wage problems such as gauging the effects on production costs of changes in wage rates or the effects of a given minimum or ceiling wage rate requires information on the distribution of the workers concerned by the wage rates they are receiving.

In general, the available data on farm wage rates are limited to State averages. For several States, sample data are available which afford some indication of the variation in wage rates paid on individual farms within the given State. These are supplemented in this chapter by data on average farm wage rates for the Crop Reporting Districts of the United States, each district being composed of a small group of counties. The factors responsible for the variations in farm wage rates are difficult to isolate but a knowledge of the types of workers receiving different wage rates, the kinds of work they do, the kinds of farms they work on, the time of the year they work, the way they are paid, the things they get besides money, the area in which they work, and the labor-market situation prevailing, help to explain the variations in farm wage rates and to describe the wage structure.

Methods of Payment

Many methods of payment of wages to farm laborers prevail in the United States. A customary classification of methods of payment is according to whether the laborer is paid on a time or a piece-work basis. During the year 1939, approximately four-fifths of all cash wages paid to farm laborers in the

United States was paid by the month, week, or day, and the remaining fifth on a piece-work basis, including contract work (table 12). ^{1/} Approximately 42 percent of the cash wages was paid to laborers hired on a day or week basis and 38 percent to laborers hired on a monthly basis.

The proportions of the 1939 cash farm wage bill paid by these different methods varied considerably among regions. In the two Northeastern divisions, wages to laborers hired on a piece-work or contract basis were less than 10 percent of all wages paid, while in the West South Central, Mountain, and Pacific divisions, this type of payment made up around 30 percent of the cash wage bill. Cotton picking (usually paid by the hundredweight) in the South, sugar beet work (usually paid on a per acre or per ton basis to contract labor) in the Mountain and other States, and vegetable, fruit, and other specialized farming operations on the West Coast account for the higher proportion of the wage bill going for piece-work or contract labor in these divisions.

Payment of wages to farm laborers on a time basis—month, day, or week—is the predominant method of payment in every geographic division of the country. Of the wages paid on a time basis more than half was paid to laborers hired by the month in four of the geographic divisions, the East and West North Central, Middle Atlantic, and Mountain States, while in the other five divisions over half went to laborers hired by the day or week. In the three Southern divisions, where cotton and tobacco with sharp but irregular labor demands lead to much hiring on a time basis for periods shorter than a month, there was the greatest excess of day or week wages over monthly wages.

Another classification of methods of wage payment is according to whether the farm laborer receives as pay other remuneration in addition to money. The forms of perquisites are varied, as they may be board and lodging, meals alone, or only certain meals; housing with or without gardening privileges, fuel, vegetables, milk, or other farm products for food; clothing and sometimes minor items such as cold drinks and tobacco. The wage rate may also be affected by whether the employer or worker furnishes transportation to the place of work or certain tools. Perquisites may take the form of certain privileges such as transportation (other than to work), participating almost as a family member in the farmer's household, use of the employer's tractor, truck, etc. on the hired man's own farm, and many other informal arrangements. There are great regional variations in practices relating to perquisites to farm laborers, with the high proportion of Negroes among farm laborers in the South having an effect on the nature of perquisites provided there.

The Department of Agriculture collects some information on perquisites in its current wage series. The four principal types of payment on which regular series

^{1/} The Census interpretation of the data on wage expenditures is that payment of wages to workers other than those hired by the month, day, or week was entirely on a piece-work or contract basis. (1940 Census of Agriculture, Vol. III, Ch. VI, pp. 3, 7.) This implies that payment of wages on an hourly basis tended to be reported in some other time unit, presumably in the "day or week" category.

Table 12.—Distribution of cash wages paid to farm laborers, by class of laborer, United States and major geographic divisions, 1939 ^{1/}

Area	:	:	:	:
	Wages to	Labor hired	Labor hired	Other hired labor
	all hired	by the month	by the day	(including piece-
	labor		or week	work and
	Percent	Percent	Percent	contract work)
United States	100.0	37.5	41.6	20.9
New England	100.0	37.2	53.2	9.6
Middle Atlantic	100.0	49.9	40.4	9.7
East North Central	100.0	50.1	36.8	13.1
West North Central	100.0	47.9	34.4	17.7
South Atlantic	100.0	30.9	50.9	18.2
East South Central	100.0	29.1	57.4	13.5
West South Central	100.0	21.9	46.5	31.6
Mountain	100.0	44.7	28.0	27.3
Pacific	100.0	28.1	40.1	31.8

^{1/} 1940 Census of Agriculture.

are issued are: (1) per month with board, (2) per month without board, (3) per day with board, and (4) per day without board. A rough indication of the value of board received as pay is afforded by comparison of the wage rates with and without board. In 1943, the average farm wage rate per month without board exceeded the rate with board by as much as \$35 in the Pacific States and by as little as \$12 in the East South Central States. Differences between the rates per day with and without board for the several major geographic divisions varied from \$1.34 in the Pacific States to 44 cents in the East South Central division.

Information on farm wage rates collected by a Special Farm Labor Inquiry for January, April, and June 1942 was analyzed for six States covering a wide range in agricultural situations. 2/ These States were New York, Nebraska, Colorado, Oregon, Arkansas, and North Carolina. They represent several different types of farming, types of labor utilization, varied situations with respect to farm income, and regional differences in the impacts of war upon agricultural employment and wages. The effect of the historic surplus of labor in the South is reflected in the low level of wage rates in Arkansas and North Carolina. Oregon illustrates an agricultural area affected by a rapid increase in nonfarm employment resulting from defense and war production activities. The Nebraska data indicate the situation in somewhat isolated, mechanized, commercial farming areas, while New York with its dairy farming and marked metropolitan influence rounds out the picture of some of the important types of agricultural regions.

Table 13 records the variations in frequency of the several types of payment indicated by the State samples. 3/ Monthly wage rates are most common in those States where livestock and dairying are important, while workers are frequently paid by the day in the Southern States, where agriculture is characterized by crop farming and marked seasonality of employment. A considerable number of workers in Oregon and Colorado are reported to be paid by the hour. Some workers are actually hired on an hourly basis where the employment is for less than full days, but often workers hired by the day are reported in the "hour" category, since employers figure the rate as so much an hour for an 8- or 10-hour day; for example, \$3 per day is considered 30 cents per hour for a 10-hour day.

The method of wage-rate payment is closely related to the extent and permanence of employment and to the race and marital status of the individual hired worker. In the Midwest, a farmer who operates a two-man unit frequently hires a single man to work through the crop season, paying him a monthly wage and giving him room and board. Often this is a neighbor's boy. In the South where many workers are needed for short periods to perform seasonal crop operations, the workers are hired by the day or at piece rates and their work on a particular farm is of short duration. On many of the plantations, hired workers or "cash hands," especially those with a family of potential workers, are furnished a house in order to have them available when needed. This is also a common practice in other parts of the country, particularly where a married man with a family is hired "per month without board," but is provided a house, garden, and frequently other perquisites.

2/ Special surveys made by the Bur. Agr. Econ. for each of the months January to June, inclusive, in 1942 to obtain information regarding wage rates and employment.

3/ Piece rates are most commonly paid in connection with harvest operations. Since the sample study was not continued beyond June, the information on piece rates was too limited to warrant summarization.

Table 13.—Percentage distribution of hired workers paid by six methods, selected States, 1942 ^{1/}

Methods of payment	New York			Nebraska			Colorado		
	Jan.	Apr.	June	Jan.	Apr.	June	Jan.	Apr.	June
Total number of workers	808	501	564	464	299	391	389	540	608
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Month with board	45.9	38.7	35.1	29.3	37.8	43.8	24.4	22.0	32.4
Month without board	19.7	23.7	23.8	8.2	18.7	12.8	28.3	23.5	21.2
Day with board	13.8	6.8	6.2	40.7	28.1	29.4	11.6	11.3	15.0
Day without board	6.8	15.2	11.2	8.4	9.0	9.7	11.8	19.3	15.3
Hour with board	4.8	2.4	14.7	8.9	1.4	1.5	1.3	3.3	0.6
Hour without board	9.0	13.2	9.0	4.5	5.0	2.8	22.6	20.6	15.5
Methods of payment	Oregon			Arkansas			North Carolina		
	Jan.	Apr.	June	Jan.	Apr.	June	Jan.	Apr.	June
Total number of workers	490	596	600	1,314	1,143	2,681	890	1,432	2,169
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Month with board	31.4	28.3	30.2	5.9	4.7	2.1	14.2	9.5	4.0
Month without board	8.8	7.7	9.0	4.2	3.8	1.9	8.4	6.2	2.9
Day with board	19.6	13.1	10.0	13.7	11.7	10.7	25.5	22.4	22.7
Day without board	10.4	10.1	9.2	60.9	71.2	78.7	33.3	40.0	52.2
Hour with board	10.2	3.9	5.0	1.5	0.6	0.4	6.6	4.8	3.2
Hour without board	19.6	36.9	36.6	13.8	8.0	6.2	12.0	17.1	15.0

^{1/} Based on replies received from farmers to special questionnaires used by the Bur. Agr. Econ. during the months of January-June 1942. The wage information obtained related to wages paid on their own farms by reporting farmers.

Geographic Variations in Average Farm Wage Rates

Farm wage rates, like other economic indices, show great differences in the major socio-economic regions. Within the major regions there are likewise marked areal differentiations. These regional and area variations in average farm wage levels are a composite result of the operation of current and historical factors which have produced rather distinctive types of agriculture and of labor practices, of location and development of various industries, of the population and labor supply distribution, and of the institutions, traditions, and customs with which various population groups are more or less identified. In Chapter 5 an analysis of some of the factors associated with geographic differences in level of prevailing farm wage rates is given, whereas here the pattern of geographic variation is merely described.

Average farm wage rates for the major geographic divisions exhibit regional variations which in general resemble the well-known pattern of differences with respect to economic development and population-resource balance. During the year 1943, as in other years, the Southern divisions had the lowest average rates and the Western divisions the highest (table 14). Differences are great even between non-Southern divisions. For example, the average rate per month with board, October 1, 1943 in the East North Central States was \$60.50, whereas in the Pacific States it was \$118.00 or nearly double the rate in the East North Central States. The average rate per day without board on October 1 for these two regions was \$4.34 and \$7.08, respectively, or 63 percent higher on the West Coast than in the East North Central States. Similar regional differences in the wage levels are found in averages for the entire year (table 14).

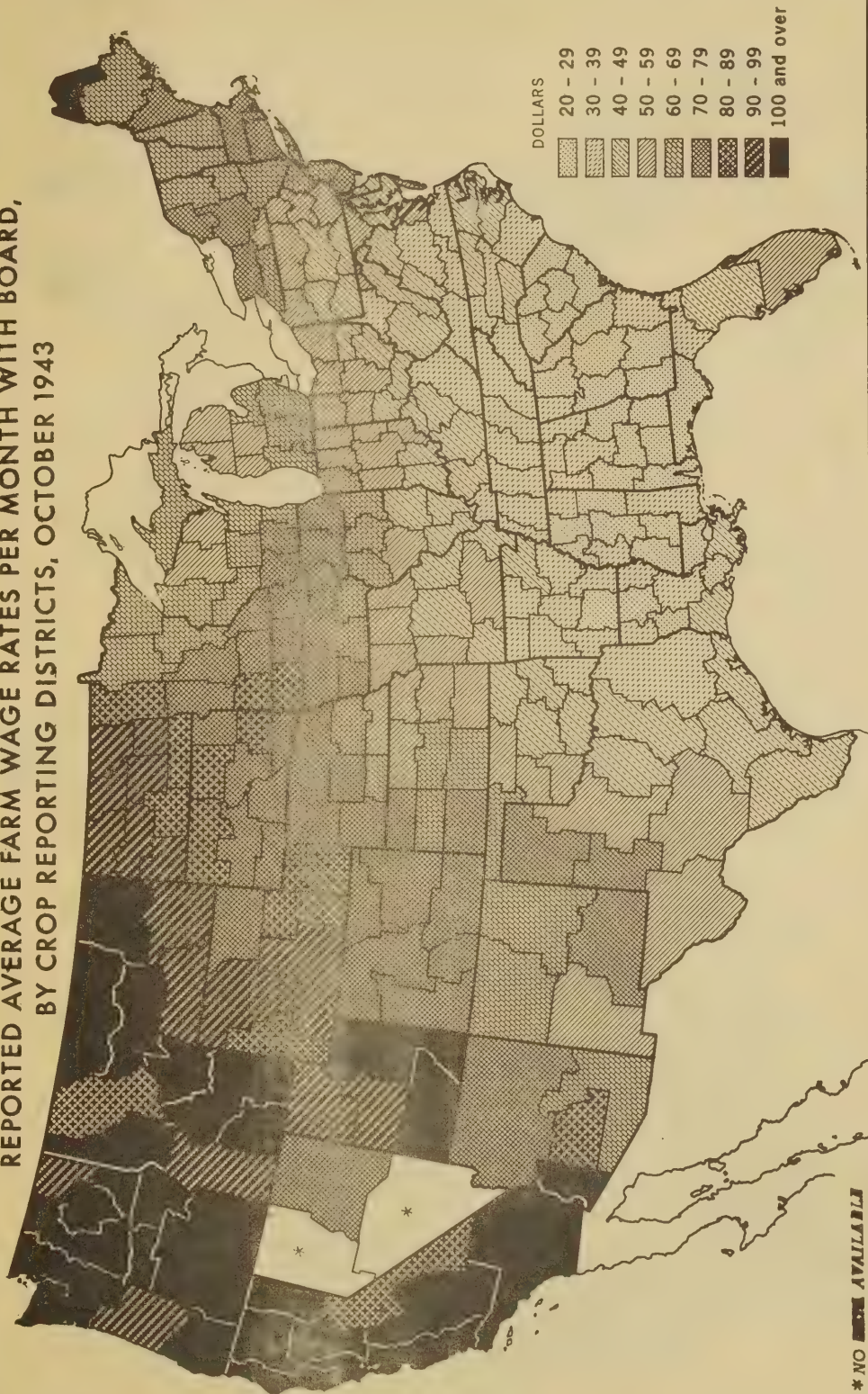
The geography of farm wage rates shows a pattern of variations not adequately reflected in the wage rate averages of major geographic divisions or even of States. Moreover, political boundaries of States do not necessarily coincide with areas delineated on the basis of common wage levels. Within States, there are marked differences in wage levels of the different sections, as is shown by the averages for groups of counties (Crop Reporting Districts) in two types of farm wage rates for October 1943 (figs. 7 and 8). In Texas, for example, the reported average farm wage per month with board, varied from approximately \$35 in the eastern part of the State to about \$75 in the Panhandle area. Almost as great differences are shown between the average rates for southern and northern Illinois. Even in a State like Iowa, which is considered rather uniform in its type of agriculture, there is a \$20 spread in average wages per month with board, from the southeast corner to the northeast. The day rates without board show corresponding differences within States.

The regular and progressive geographic gradations in farm wage rates are clearly evident in figure 9, which is based on the map of day rates without board by Crop Reporting Districts. There is an upward gradation in farm-wage-rate belts, starting from a low in the southeastern States and becoming progressively higher as one proceeds northwestward across the country to the State of Washington. The belt with lowest wages--from \$1 to \$2 per day without board--includes South Carolina and protrudes across the middle of Georgia,

Table 14.-Annual average farm wage rates, United States and major geographic divisions, 1943

Area	Per month		Per day	
	With	Without	With	Without
	board	board	board	board
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
United States	61.91	72.85	2.87	3.27
New England	69.54	103.65	3.55	4.56
Middle Atlantic	60.09	89.81	3.34	4.26
East North Central	58.25	79.25	3.24	4.04
West North Central	66.25	85.75	3.63	4.56
South Atlantic	31.91	45.36	1.72	2.20
East South Central	30.61	42.16	1.58	2.02
West South Central	42.75	58.70	2.27	2.74
Mountain	80.14	107.57	3.86	4.77
Pacific	112.39	148.10	5.23	6.57

REPORTED AVERAGE FARM WAGE RATES PER MONTH WITH BOARD,
BY CROP REPORTING DISTRICTS, OCTOBER 1943



U. S. DEPARTMENT OF AGRICULTURE

NEG. 43522

BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 7

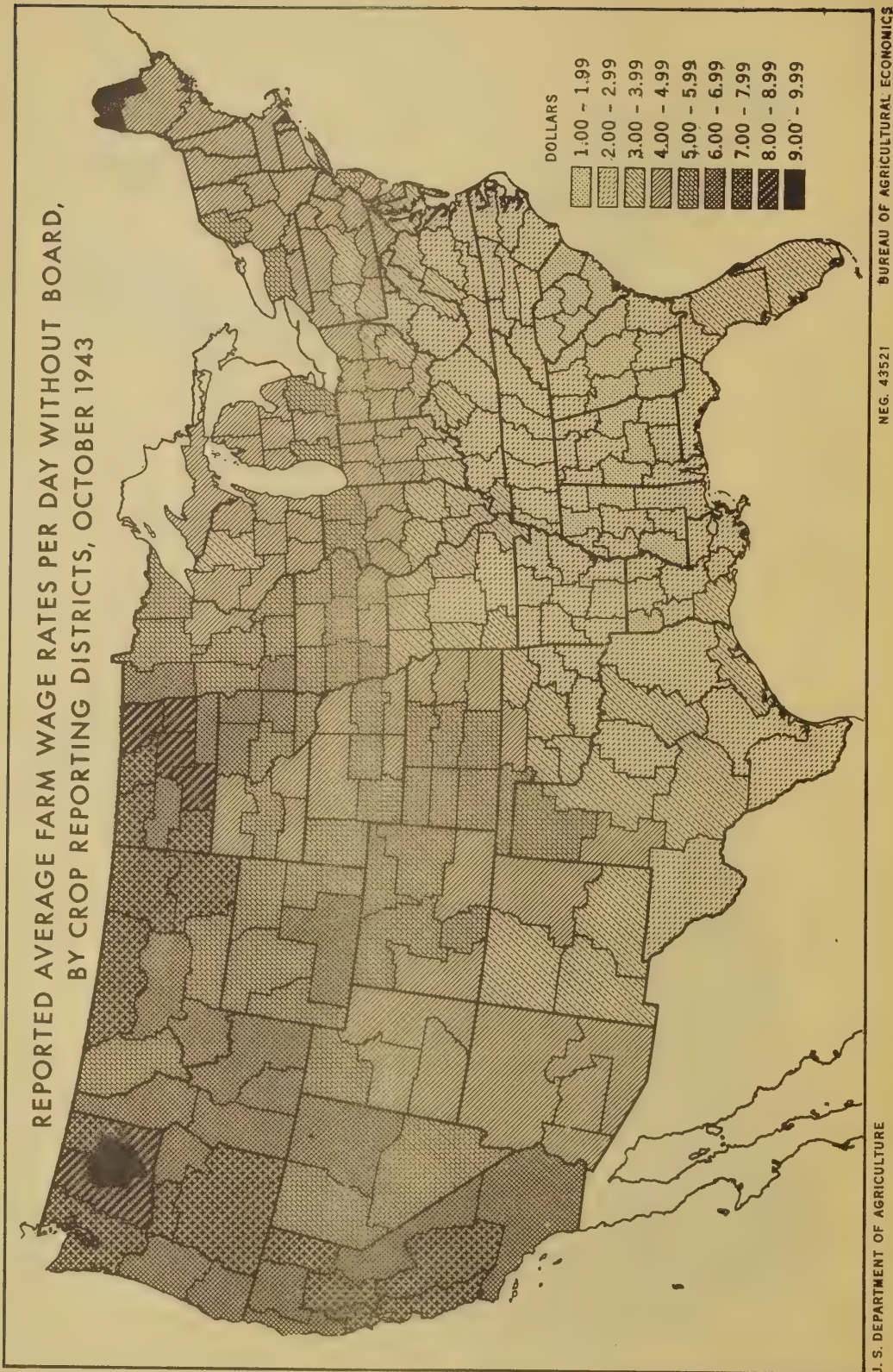


FIGURE 8

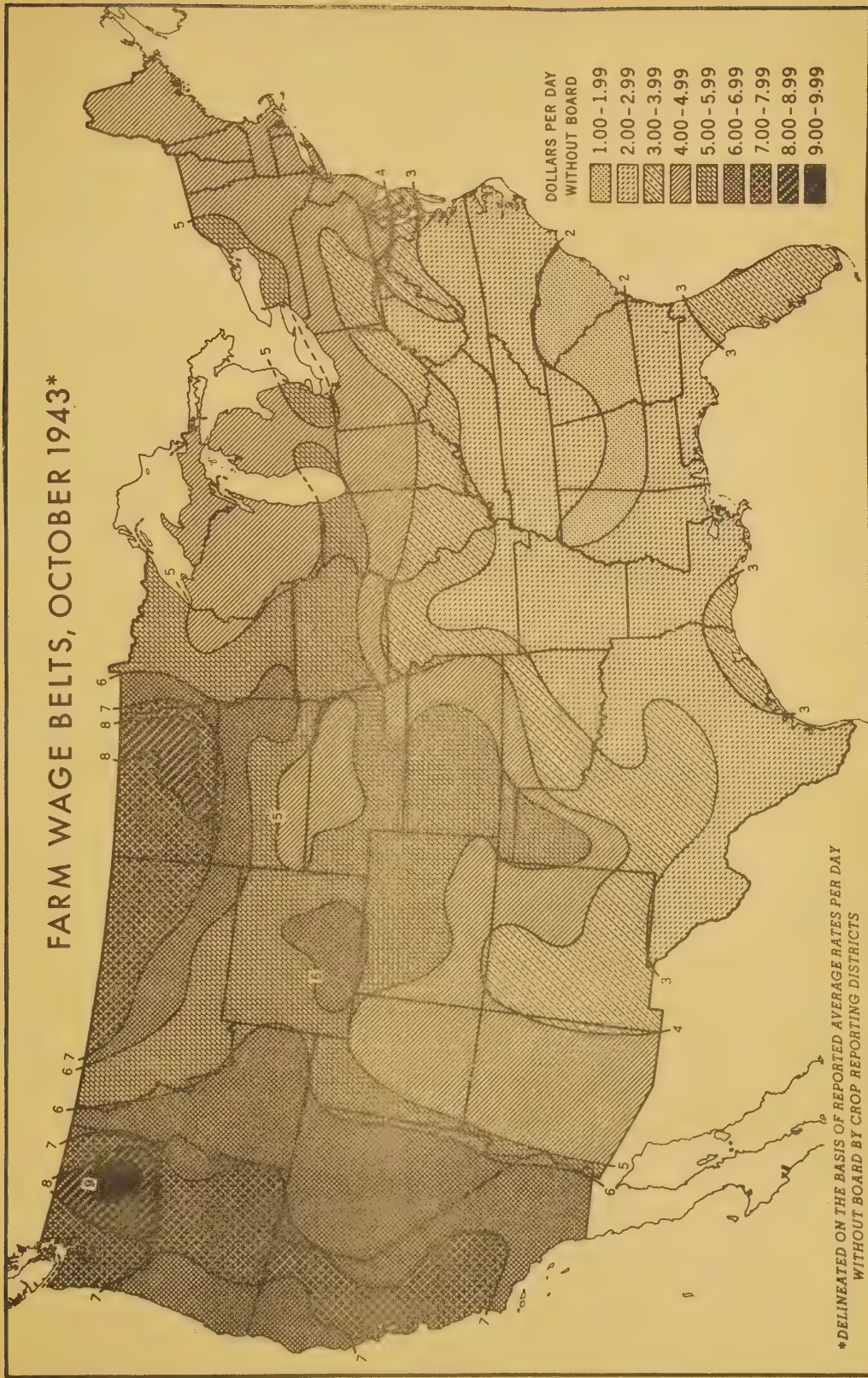


FIGURE 9

Alabama, and the upper part of Mississippi. These rates of between \$1 to \$2 a day relate to October 1943, and are more than twice those paid in a pre-war year like 1939. In this oldest part of the Cotton Belt there is a high density of farm population, a high proportion of Negroes and sharecroppers, a good deal of land worn out from continuous cotton cropping, and the associated conditions of low income and living standards. Encircling this belt is the \$2 to \$3 per day belt which includes the rest of the South, except for Florida and parts of Texas and Louisiana.

Successively higher wage belts follow in a northwesterly course across the Great Plains, the Western Range area, and the Pacific States. The Northeastern and Middle Western Dairy areas and a part of the Corn Belt are in the \$4 to \$5 per day wage belt, which winds through eastern Kansas, parts of New Mexico, and Colorado, and most of Utah and Arizona. The very highest wage belt, where wages were more than \$9 a day, is in western Washington, encircled by a belt where \$8 to \$9 a day wages were paid. In North Dakota there is another \$8 to \$9 area, with progressive downward gradations in wage rates in every direction from this area.

The map of wage belts, based on rates per day without board, does not afford the most appropriate delineation in all areas, especially in the dairy areas, where monthly rates are more important. Figure 7 indicates more correctly the levels of prevailing wages for the Northeastern States in relation to those in other areas. But the general patterns are similar, with the areas of poorer land, lower farm income, lower living standards, and a relative labor surplus showing lower farm wage rates of both types.

The geographic variations in farm wage rates appear not only in time rates, but also in piece rates. Interpretation of the factors making for variation in the piece rate for a particular operation on a given crop is more difficult than in the case of time rates, owing to the differences among States and areas in yields, field conditions, and varieties of the particular crop, the lack of standardization in the performance unit used for payment of the piece rate, as well as in the method of performing the operation. Daily earnings are affected by all of these variables as well as by the type and skill of the worker, so that differences in piece rates between geographic areas do not necessarily mean dissimilar daily earnings for workers of the same ability. The piece-rate differential among areas for a particular operation may represent only an allowance for differences in length of time required to perform the given unit operation, such as picking 100 pounds of cotton or 1 quart of strawberries. A summary of selected piece-rate data for recent dates indicating State variation is given in table 15.

Variability of Farm Wage Rates

From the viewpoint of the hired farm laborer, the important figure is the wage rate he receives rather than the average of rates paid to all workers. To know how many workers receive wage rates which are some specified amount above or below the average is also important when appraising the effects of changes in wage rates on production costs and in determining the net shift of

Table 15.-Piece rates paid farm workers for specified operations by States, 1942 and 1943 1/

State	: Picking :		: Picking strawberries :		: Picking bean's :		: Shearing : sheep :		: Cutting : asparagus :	
	: 100 pounds : seed cotton 2/ :		: per quart :		: per bushel :		: per head :		: per pound :	
	: 1943 :		: June 1, 1942: June 1, 1943: June 1, 1942: June 1, 1943:		: June 1, 1942: June 1, 1943: June 1, 1942: June 1, 1943:		: June 1, 1942: June 1, 1943: June 1, 1942: June 1, 1943:		: June 1, 1942: June 1, 1943: June 1, 1942: June 1, 1943:	
	dollars	cents	cents	cents	cents	cents	cents	cents	cents	cents
Illinois	2.00	---	---	---	---	---	---	---	---	---
Kansas	1.95	3.0	---	---	---	---	18	---	---	---
Maine	---	---	---	---	---	---	---	---	---	---
New Jersey	---	3.7	5.0	---	---	---	---	---	2.9	---
Pennsylvania	---	2.5	---	25	---	---	---	---	---	---
Ohio	---	2.6	---	---	---	---	22	---	---	---
Missouri	2.00	2.8	---	---	---	---	25	---	---	---
Virginia	1.80	---	5.0	---	---	---	---	---	---	---
North Carolina	1.75	1.9	3.0	24	25	---	---	---	---	---
South Carolina	1.25	---	---	15	30	---	---	---	---	---
Georgia	1.30	---	---	---	30	---	---	---	---	---
Florida	1.45	3.8	---	35	36	---	---	---	---	---
Kentucky	2.00	2.8	3.8	---	---	---	---	---	---	---
Tennessee	1.80	3.0	4.2	---	---	---	25	---	---	---
Alabama	1.40	---	---	---	---	---	---	---	---	---
Mississippi	1.70	---	---	22	---	---	---	---	---	---
Arkansas	1.70	3.0	---	---	---	---	---	---	---	---
Louisiana	1.50	3.4	---	25	35	---	---	---	---	---
Oklahoma	1.95	---	---	---	---	---	---	---	---	---
Texas	1.80	3.7	---	---	---	---	17	---	---	---
New Mexico	2.00	---	---	---	---	---	---	---	---	---
Arizona	2.70	---	---	---	---	---	---	---	---	---
California	2.10	---	---	---	---	---	---	---	2.8	---
Idaho	---	---	---	---	---	---	---	---	---	---
Washington	---	2.8	3.8	---	---	---	---	---	2.5	---
Oregon	---	2.8	4.0	---	---	---	15	---	3.5	---

1/ Data for 1942 from Farm Wage Rates, Farm Employment and Related Data, Bur. Agr. Econ., January 1943;
 data for 1943 from Farm Labor Report, Bur. Agr. Econ., June and November 1943.
 2/ Includes rates paid for snapping bolls converted to seed cotton equivalent.

workers from one wage level to another. Not all employers of farm labor (nor all workers) may be affected, for example, by an increase in average wage rates, since some who were already paying wages equal to the higher average level (or others) may not have increased wage rates at all. Similarly the dispersion of rates paid individual workers about their average is relevant in anticipating the effects of setting floors or ceilings in wage regulation. Obviously the effects of a particular wage ceiling will depend to a considerable extent on the number of workers who received wage rates substantially above or below the ceiling adopted.

Some indications of the variability of wage rates within selected States for four common methods of payment were obtained in the Special Farm Labor Inquiry for 1942. From frequency distributions of wage rates, averages were obtained and certain measures of the variation of individual wage rates about their average (median or mean). In general, these figures indicate that approximately one-half the workers received wage rates differing from the median wage rate by no more than about 20 percent, although there are marked State differences in this percentage (tables 16 and 17). For example, half of the workers paid by the month with board on farms sampled in New York State in June 1942 received less than \$42.59 and half received more. One-fourth of them worked at wage rates between \$30.68 and \$42.59 and one-fourth at rates between \$42.59 and \$52.61. Rates for this middle half of the workers fell within a range of approximately 25.8 percent of the median wage rate. Rates for the lower and upper fourths of the workers were outside of this range, one-fourth receiving wages at rates less than \$30.68 and one-fourth receiving wages at rates higher than \$52.61.

The difference between the first and third quartiles shown in tables 16 and 17 provides an absolute measure of the dispersion of the specified type of farm wage rate in a given State, this range covering one-half of the rates for all workers reported. For a relative measure of the dispersion to be used in comparing States with very different median wage rates, such as New York and North Carolina, the average of the absolute differences of the first and third quartiles from the median has been expressed as a percentage of the median. In the case of the month-with-board rates for these two States, the range between the quartiles in New York is twice that for North Carolina, but because North Carolina's median wage rate is only half that for New York the two States show approximately the same coefficient of variability.

When a large proportion of the total workers receiving one type of wage rate are hired to perform a type of work where individual skill is not especially important or at least is not differentially rewarded, the coefficient of variability tends to become very small. In Arkansas, for example, rates per day without board in June have a coefficient of only 7.8 percent, reflecting the relative uniformity of wage rates to cotton hoe hands. For the same type of rate in Oregon, the coefficient of variability is 33.3 percent of the median rate due in part to the very different kinds of tasks performed by laborers hired by the day without board.

The scarcity of information on the spread of wage rates of a given type has forced heavy reliance on average wage rates in analysis of earnings and income of farm laborers and in problems connected with wage regulation. Repeated use of the average wage rate often causes the variations from the

Table 16.-Comparisons of level and variations of monthly wage rates with and without board, selected States, June 1942 ^{1/}

Type of rate and State	Number of :		Mean wage :		Median :		First :		Third :		Coefficient of	
	workers :	reported :	rate :	Dollars	wage rate :	Dollars	quartile :	Dollars	quartile :	Dollars	variability	2/ Percent
<u>Month with board</u>												
New York	198		41.41		42.59		30.68		52.61		25.8	
Nebraska	171		46.83		47.75		35.00		55.00		20.9	
Colorado	197		51.60		48.40		41.56		59.91		19.0	
Oregon	181		60.12		60.61		49.73		70.74		17.3	
Arkansas	56		22.64		22.34		17.82		26.85		20.2	
North Carolina	106		21.47		20.65		14.86		25.56		25.9	
<u>Month without board</u>												
New York	134		71.27		69.33		56.54		81.58		18.1	
Nebraska	50		60.73		60.00		50.89		69.38		15.4	
Colorado	129		71.03		71.54		60.12		78.98		13.2	
Oregon	54		86.83		89.32		78.75		99.54		11.6	
Arkansas	52		44.60		44.64		33.75		56.79		25.8	
North Carolina	75		45.24		38.57		24.56		51.96		35.5	

^{1/} Based on replies received from farmers to special questionnaires used by the Bur. Agr. Econ. during the months of January-June 1942. The wage information obtained related to wages paid on their own farms by reporting farmers.

^{2/} Average of absolute differences of the first and third quartile from the median expressed as a percentage of the median.

Table 17.—Comparisons of level and variations of daily wage rates with and without board, for selected States, June 1942 ^{1/}

Type of rate : and State :	Number of : workers : reported : Number	Mean wage : rate : Dollars	Median : wage rate : Dollars	First : quartile : Dollars	Third : quartile : Dollars	Coefficient of : variability ^{2/} : Percent
<u>Day with board</u>						
New York	35	2.11	1.98	1.48	2.18	17.7
Nebraska	115	2.19	2.05	1.61	2.46	20.7
Colorado	91	2.15	2.05	1.90	2.51	14.9
Oregon	60	2.92	2.62	2.23	3.62	26.5
Arkansas	287	1.24	1.15	.99	1.46	20.4
North Carolina	594	1.22	1.17	1.00	1.41	17.5
<u>Day without board</u>						
New York	---	---	---	---	---	---
Nebraska	38	2.74	2.60	1.84	3.24	26.9
Colorado	93	2.97	2.94	2.50	3.45	16.2
Oregon	55	3.71	3.60	2.25	4.65	33.3
Arkansas	2,110	1.49	1.47	1.35	1.58	7.8
North Carolina	1,367	1.35	1.22	1.00	1.50	20.5

^{1/} Based on replies received from farmers to special questionnaires used by the Bur. Agr. Econ. during the months of January-June 1942. The wage information obtained related to wages paid on their own farms by reporting farmers.

^{2/} Average of absolute differences of the first and third quartiles from the median expressed as a percentage of the median.

average to be overlooked. Where the average is either high or low, it is important to know the extent to which some groups of workers receive wages differing by a considerable amount from the average. For example, the North Carolina median wage rate of \$20.65 per month with board contrasts sharply with a rate of \$60.61 for Oregon. Also, the much lower median for the North Carolina sample is accompanied by a greater variability in the rates per month with board. As a result, the lowest-paid fourth of the workers received less than \$15.00 (72 percent of the median) in North Carolina, whereas in Oregon they received up to \$50.00 (82 percent of the median).

Variations in Wage Rates in Relation to Size and Type of Farm

Size of farm.—The size of farm enterprise appears to be a factor affecting the level of wage rates. On the basis of total value of production as a measure of size of farming operations, data from the 1940 Census on wages and hired employment in the different value groups suggest that larger farms may pay higher wage rates (table 18).

For the United States as a whole the estimated annual cash wage cost per hired worker was only \$154 on farms with value of products of less than \$1,000 as compared with \$327 on farms with total value of products of from \$1,000 to \$10,000 per farm, and with \$583 on farms of \$10,000 or more value of products per farm. This relationship is not due merely to the preponderance of Southern farms in the lower value-of-production classes and the low rates of farm wages in the South. In every geographic division the relationship between annual average cash wage cost per hired worker and total value of products per farm is similar. In most areas the wage cost per worker is slightly higher in the very lowest income groups than in the next higher group. This is probably due to the fact that the very lowest groups contain a number of farms which are not bona fide "low income" farms, being either rural residence for part-time or retired operators, farms which had partial crop failures during 1939, or farms which were just going into operation.

From the group of farms with production per farm valued at from \$600 to \$999 in 1939, every major geographic division shows a steady rise in the annual wage cost per hired worker in the progressively higher value groups. ^{4/} Several factors are probably operating to cause such differentials. Farms with higher average production may employ greater amounts of those types of labor that are generally paid at higher rates, they may pay higher rates on the average for a given type of labor, and the man-year of hired work involved may average a greater number of days. The relative importance of these several factors in producing higher wage costs per man-year of hired labor on larger

^{4/} A minor exception occurs in the East South Central States.

Table 18.-Average annual cash wage costs per worker, by value groups of farms, United States and major geographic divisions, 1939 1/

Value group	: : New		: : Middle		: East : West		: South : West		: : :	
	States:England:Atlantic:	Dollars	Atlantic:Central:	Dollars	North : North	Dollars	Central:Atlantic:	Dollars	Central:Mountain:	Pacific
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
All farms	329	448	390	369	368	210	152	226	509	659
Classified farms 2/	329	447	390	370	369	210	153	226	509	660
\$1 - 249	148	406	193	183	220	103	61	140	249	285
250 - 599	148	461	291	230	228	103	83	117	234	293
600 - 999	162	271	188	207	224	126	101	133	274	366
1,000 - 2,499	256	305	285	295	304	177	170	208	392	433
2,500 - 3,999	338	381	287	405	377	245	193	251	472	529
4,000 - 5,999	396	408	398	421	427	275	228	286	555	658
6,000 - 9,999	454	450	518	502	536	283	304	275	621	758
10,000 and over	583	659	693	707	571	404	279	344	669	868

1/ Based on data from Analysis of Specified Farm Characteristics for Farms Classified by Total Value of Products. The annual average number of hired workers is estimated on the basis of hired workers reported at the two Census dates from the relation of April 1, and October 1, hired farm employment to annual average hired farm employment in the Bur. Agr. Econ. series. The average annual cash wage cost per hired worker represents the average wage cost for 12 man-months of work. While such a man-year of hired labor is the common unit for all value classes, the actual content of the man-year in terms of days of hired labor used may vary in the several value classes. Available data do not provide the necessary information on average number of days worked per month by the estimated monthly average number of workers to afford a measure of labor input in terms of days or hours.

2/ All farms reporting some value of products sold, traded, or used by farm households in 1939.

farms cannot be ascertained from the data available. Other data are needed before it can be learned conclusively whether operators of larger farms in a particular area pay for a given type of work and quality of worker a higher wage rate than do operators of smaller farms.

The only criterion of size of operation available from the 1942 sample study is the number of crop acres, which is not entirely satisfactory as a measure of size of enterprise in States where livestock and dairying are important, or where there are other predominant types of farms which utilize different acreages of cropland for comparable scales of operation. Moreover, many of the State samples for certain classes of wage rates by type of payment are so small that when broken down into size-of-farm groups the medians are subject to a considerable margin of sampling error.

For month-with-board wage rates, the correlation of wage level with size of farm is suggested by data for New York, Nebraska, and Colorado, but not by the information from Oregon and North Carolina (table 19). Undoubtedly the type-of-farm differences tend to obscure the relationship of the level of wage rates with size of farming enterprise when comparisons are possible only on a crop-acre basis. However, in every State, the median wage reported on farms in the largest size group is higher than the median wage for all size of farms. In New York the median wage for farms with 200 or more acres of cropland exceeded the median wage rate for all farms of less than 50 acres by 32 percent.

For monthly rates without board, the sample data on median wage rates by size of farm were available only for New York and Colorado, the other States having too few workers in this method of payment class (table 20). Again the New York figures, which are from a sample predominantly of dairy farms, show a positive relationship between the wage level and size of farm, but the Colorado figures for June 1942 show the highest average wage rates in the size class next to the largest. Similar figures for Colorado for the months of January and April, however, show no consistent relationship between size of farm and wage level. The heterogeneous nature of Colorado agriculture makes the cropland criterion of size of farm a poor indicator of differences in scale of operations for different types of farms.

For day rates with and without board, only in Arkansas and North Carolina samples were there sufficient workers to justify the tabulations to obtain medians by size of farm (table 21). Although the trend is somewhat irregular, there is for these classes a suggestion of a negative correlation of wage levels with size of farm in the case of North Carolina, with no clear trend in the case of Arkansas. The lower day rates on larger farms in North Carolina may be partly explained by the fact that tobacco farms, which are smaller in average size than cotton farms, pay better wages.

Other factors may be the presence on larger farms of other inducements to workers, such as employment for somewhat longer periods, better field conditions that make the work easier, and possibly such conditions as the

Table 19.-Farm wage rates per month with board, by size of farm, for selected States, June 1942 ^{1/}

State and size of farm (crop acrea)	: Number of workers:	
	: reported	: Median wage rate
	<u>Number</u>	<u>Dollars</u>
<u>New York</u>		
All sizes	198	42.59
0 to 49	32	37.50
50 to 99	85	40.21
100 to 199	61	47.04
200 and over	20	49.50
<u>Nebraska</u>		
All sizes	171	47.75
0 to 99	*	*
100 to 199	32	44.17
200 to 299	30	46.50
300 and over	105	49.05
<u>Colorado</u>		
All sizes	197	48.40
0 to 99	19	45.54
100 to 199	43	46.34
200 to 299	29	48.28
300 and over	106	50.40
<u>Oregon</u>		
All sizes	181	60.61
0 to 49	22	47.50
50 to 99	28	55.83
100 to 199	45	64.50
200 to 299	12	62.50
300 and over	74	61.88
<u>North Carolina</u>		
All sizes	106	20.65
0 to 19	11	23.75
20 to 49	39	19.87
50 to 99	35	19.56
100 to 199	16	21.94
200 and over	*	*

* Inadequate data.

^{1/} Based on replies received from farmers to special questionnaires used by the Bur. Agr. Econ. during the months of January-June 1942. The wage information obtained related to wages paid on their own farms by reporting farmers.

Table 20.--Farm wage rates per month without board, by size of farm, for New York and Colorado, June 1942 ^{1/}

State and size of farm (crop acres)	Number of workers :	
	: reported Number	: Median wage rate Dollars
<u>New York</u>		
All sizes	134	69.33
0 to 49	*	*
50 to 99	23	64.69
100 to 199	65	67.00
200 and over	36	71.45
<u>Colorado</u>		
All sizes	129	71.54
0 to 99	21	71.87
100 to 199	42	70.11
200 to 299	18	75.00
300 and over	48	71.59

* Inadequate data.

^{1/} Based on replies received from farmers to special questionnaires used by the Bur. Agr. Econ. during the months of January-June 1942. The wage information obtained related to wages paid on their own farms by reporting farmers.

Table 21.--Farm wage rates per day, with and without board for Arkansas and North Carolina, June 1942 ^{1/}

State and size of farm (crop acres)	: Per day with board		: Per day without board	
	: Number of	:	: Number of	:
	: workers	: Median	: workers	: Median
	: reported	: wage rate	: reported	: wage rate
	<u>Number</u>	<u>Dollars</u>	<u>Number</u>	<u>Dollars</u>
<u>Arkansas</u>				
All sizes	287	1.15	2,110	1.47
0 to 19	35	1.09	89	1.42
20 to 49	134	1.17	392	1.49
50 to 99	74	1.12	365	1.48
100 to 199	35	1.28	432	1.48
200 to 299	---	---	109	1.44
300 and over	9	1.25	723	1.47
<u>North Carolina</u>				
All sizes	594	1.17	1,367	1.22
0 to 9	41	1.29	48	1.51
10 to 19	112	1.21	121	1.38
20 to 49	285	1.18	367	1.29
50 to 99	91	1.16	321	1.09
100 to 199	52	1.05	172	1.24
200 and over	---	---	338	1.11

^{1/} Based on replies received from farmers to special questionnaires used by the Bur. Agr. Econ. during the months of January-June 1942. The wage information obtained related to wages paid on their own farms by reporting farmers.

workers' preference for working in groups, and some perquisites. 5/ In Arkansas, these day wage rates are heavily weighted by payments to the most unskilled class of workers--the hoe hands, cotton choppers, etc. With an abundant supply of such labor in the South, there was no necessity for one group of farmers to pay more than another group for workers to do this kind of work. Consequently no marked differences appeared in the median wages for farms of different size.

Type of farm.-- The type of farm as well as the size is a factor associated with differences in wage levels, since the type of enterprise determines the kinds of work to be performed, the skills required, and the duration of the work. For June 1942, estimates of average wage rates by type of farm for major geographic divisions have been developed from reports of about 50,000 farmers (table 22). According to these indications workers on vegetable farms and on livestock farms received the highest average wage per day without board for the United States as a whole. Although the United States average is the same for livestock and vegetable farms (\$2.10), within the regions the averages for the two types differ. For example, in New England,

5/ In some situations piece rates are higher on small farms than on large ones. The following observation by William H. Metzler of the Bureau of Agricultural Economics is illuminating:

"During January of the 1942-43 cotton picking season large growers on the west side of the San Joaquin Valley, California, were paying \$2.50 per hundred pounds while small growers on the east side were averaging \$2.75. Even with that differential...workers on the west side reported earnings of 91 cents an hour compared with 59 cents on the east side. The large operator has advantages in capital and equipment that enable him to put his soil in better condition, keep weeds down more effectively, and produce heavier yields. Workers usually prefer to work on such farms unless a sufficient wage differential is paid to make it worth their while (to work on small farms). When both types of farms are held to the same wage rate the larger operator obtains his workers first and has some power of selection as to whom he will or will not hire while the smaller operator must take those that remain.

"Labor contractors with large crews prefer to work for the large operators who can keep their crews busy for an extensive period. Large family groups prefer to do the same. Neither care to break up their group if they can help it. They will go to the smaller jobs after the larger ones have been taken...Large growers have housing for seasonal workers much more frequently than the smaller ones. This advantage is capable of great stretching if the grower feels that it is necessary. He can expand housing to include lights, water, fuel, use of a milk cow, feed for the cow, milk, vegetables, fruit, gasoline, a trip to town once or twice a week, alcoholic stimulants, entertainment, or other items that will attract or hold workers."--quoted from a letter to Carl C. Taylor from Walter C. McKain, March 7, 1944.

Table 22.--Farm wage rates per day without board, by type of farm, United States and geographic divisions, June 1, 1942 ^{1/}

Area	:Live-:		:	:Field:Vege-		:Fruit	:Self-	2/:All
	:stock:	Dairy:	Poultry:	crops:	tables:	& nuts:	sufficing:	farms
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
United States	2.10	1.35	1.65	2.00	2.10	2.00	1.80	1.85
New England	3.50	3.10	2.35	3.30	3.10	3.10	3.30	3.15
Middle Atlantic	3.30	2.40	2.85	2.85	2.75	2.85	2.35	2.85
East North Central	2.45	2.70	2.70	2.70	2.95	2.70	2.15	2.60
West North Central	2.60	2.10	2.10	3.10	3.10	---	2.10	2.55
South Atlantic	1.30	1.50	1.30	1.10	1.50	1.75	1.30	1.40
East South Central	1.20	1.20	1.00	1.20	1.40	1.30	1.20	1.20
West South Central	1.50	1.50	1.75	1.50	1.50	1.50	1.50	1.55
Mountain	3.00	2.50	2.50	3.00	2.75	2.75	2.50	2.75
Pacific	3.45	3.25	2.20	3.50	4.30	3.40	3.40	3.25

^{1/} Based on replies received from farmers to special questionnaires used by the Bur. Agr. Econ. during the months of January-June 1942. The wage information obtained related to wages paid on their own farms by reporting farmers.

^{2/} A miscellaneous group of farms on which the major single source of income was represented by products grown on the farm and used at home.

Middle Atlantic, and the Mountain divisions, the average daily rates on livestock farms were considerably higher than on vegetable farms, but the reverse was true in five other geographic divisions.

Outside of New England and Middle Atlantic States, vegetable farms ranked first or second in level of day rates without board, being first in four geographic divisions, second in three divisions. The June 1942 day rates without board on fruit and nut farms were not greatly different from those on vegetable farms, except in the Pacific States where they were substantially lower.

Somewhat surprisingly the rate for workers on dairy farms is one of the lowest and is about the same as on the so-called "self-sufficing" farms. However, it must be recalled that workers hired on dairy farms on a day-rate basis include many workers "picked up" for a day or a few days' work. The work done by such day hands would be relatively unskilled and would be paid for accordingly. This also applies to day workers on poultry farms, except that their work is usually somewhat lighter than on dairy farms, so less able-bodied workers could be utilized.

Variations within type of farm.-Special studies were made by the Bureau of Agricultural Economics in the fall of 1942 regarding the dairy labor situation in three milksheds, Los Angeles, Kansas City, and Jefferson County, Wisc. 6/ These studies illustrate the variation of farm wage rates for dairy workers within an area according to the special type of job performed, and the variation between areas in average rates of pay for the same type of work. The average monthly rate for all dairy workers on the dairy farms surveyed in the Los Angeles milkshed was \$180 a month, while it was only \$83 in the Kansas City milkshed, and even less in Jefferson County, Wisc. Within the Los Angeles milkshed, differences in wage rates for the same jobs among the subareas of the milkshed were as follows:

<u>Type of job</u>	<u>Monthly wage rate</u>		
	<u>Los Angeles dry lot</u> <u>Dollars</u>	<u>San Bernardino</u> <u>Dollars</u>	<u>South San</u> <u>Joaquin Valley</u> <u>Dollars</u>
Hand milker	179	155	141
Machine milker	209	155	147
General dairy hand	109	108	108
Milker - field hand	---	---	104

6/ Labor and Other Factors Influencing Dairy Production in the Los Angeles Milkshed, Nov. 1942, Feb. 1943; The Dairy Labor Situation in the Kansas City Milkshed, Nov. 1942, Feb. 1943; The Farm Labor Situation on Wisconsin Dairy Farms, Nov. 1942.

The Los Angeles study showed that for the same type of work the larger dairy farms tended to pay higher wage rates even within the same subarea. The average monthly wage rates for two types of dairy workers in the dry-lot area of Los Angeles County were as follows:

<u>Size of dairy</u>	<u>Monthly wage rate -</u>	
	<u>Hand milker and stripper</u> <u>Dollars</u>	<u>Machine milker</u> <u>Dollars</u>
All sizes	179	209
Less than 50 cows	130	—
50 - 99 cows	171	202
100 - 199 cows	181	204
200 or more cows	204	215

The average wage rates of \$179 for the hand milker and \$209 for the machine milker in the Los Angeles dry-lot area cover a wide range of variation of individual wage rates. Even after certain "standards" were defined to exclude physically handicapped workers and to exclude others with unusual amounts of perquisites or special arrangements, the hand milkers on these "standard" jobs received all the way from \$140 a month to more than \$240 a month, and the machine milkers from \$160 to \$300.

Such a spread in wage rates for the same type of work was in part due to the wartime conditions of labor scarcity in the Los Angeles milkshed area and the practice of "bidding up" among dairymen for the experienced workers available. In October 1941, the rate for hand milkers on the largest dairies (200 or more cows) in the dry-lot area of Los Angeles was only 10 or 7 percent more than the average of \$137 for all farms, while in October 1942 it was \$25 or 14 percent above the average. These data, however, provide no basis of inference as to whether wartime influences in other areas and types of farms have or have not led to greater variability in the wage rates paid individual workers for the same type of work. Other wartime developments connected with the program of stabilizing farm wage rates have no doubt tended to reduce the extent of variability in wage rates for crops and areas in which specific wage ceilings have been set by the War Food Administrator. 7/

7/ See Chapter 8.

Chapter 4

WAGES AS AN EXPENSE OF AGRICULTURAL PRODUCTION

Farmers' expenditures for hired labor or the farm wage bill have two aspects—one as an expense of production to farm operators, and the other as income to hired farm laborers. On a national basis the farm wage bill represents the share of agricultural income received by those who work on farms for wages. It also represents the cost of hired labor as a factor of production in the agricultural industry. Both the income and the expense aspects of wages paid are important in agricultural problems, whether these problems are considered on a national or on a broad regional basis, for farms of a given type or for individual farms.

Hired Labor's Share of the National Farm Income

During the 30 years preceding 1940, the annual farm wage bill, including value of perquisites furnished to hired labor, averaged slightly more than 1 billion dollars, with a high of 1.8 billion dollars in 1920 and a low of 0.5 billion dollars in 1933 (table 23). During the 30-year period, gross farm income averaged 10.8 billion a year and expenses of production averaged 6.0 billion a year. Thus the farm wage bill during these years amounted to 9.5 percent of gross farm income. In relation to net income received from farming by all persons engaged in agriculture (operators, unpaid family workers, and hired workers), the wage bill averaged 17.6 percent in the period 1910-39.

By 1943, the wartime rise in farm wage rates had raised the year's total farm wage bill to an estimated 1.9 billion dollars, the highest on record. Yet in relation to the net farm income of all persons engaged in agriculture, the total 1943 farm wage bill constituted a smaller percentage than in any of the preceding 33 years except in 1917-18 in the first World War, and in 1934 in the depression. The wage bill absorbed 13.8 percent of the 1943 net farm income as compared with 14.5 percent in 1942 and 17.8 percent in 1940, or with a low of 13.3 percent in 1918.

Wage differentials and differences in amounts of hired labor used in the several major geographic divisions bring about regional variations in hired labor's share of farm income. As the value of perquisites received by hired laborers comprises a part of their remuneration, regional differences in the wage bill are partly affected by the prevailing practices in the areas with respect to the furnishing of perquisites. Over the span of the last 30-odd years, perquisites have tended to comprise a smaller proportion of the total remuneration received by hired laborers. In the period 1910-14, the value of perquisites made up approximately 30 percent of the total wage bill. Except for the depression years when the cash wage bill shrank relatively more than the value of perquisites, the relative importance of perquisites has declined steadily during the period. By 1940, perquisites made up only 20.6 percent of the total wage bill and continued to decline, with the preliminary estimate for 1943 being 15.5 percent.

Table 23.-The farm wage bill in relation to gross and net farm income, 5-year averages, 1900-39, and annually 1940-43, United States

Period	Gross farm income			Net farm income			Wages and perquisites to hired labor		
	: income 1/			: to all persons			: As percentage		
	: Gross farm			: engaged in			: of gross		
	: income 1/			: agriculture 2/			: farm income		
	Million Dollars	Million Dollars	Million Dollars	Million Dollars	Million Dollars	Million Dollars	Percent	Percent	Percent
1943	22,738	13,979	1,933				8.5		13.8
1942	18,474	10,820	1,566				8.5		14.5
1941	13,799	7,592	1,197				8.7		15.8
1940	10,962	5,617	1,000				9.1		17.8
1935-39	10,424	5,626	928				8.9		16.5
1930-34	8,343	3,508	736				8.8		21.0
1925-29	13,479	7,130	1,280				9.5		13.0
1920-24	12,372	6,182	1,301				10.5		21.0
1915-19	12,918	7,812	1,139				8.8		14.6
1910-14	7,491	4,417	784				10.5		17.7

1/ In addition to cash income from farm marketings, the gross income figure includes Government payments, value of farm products consumed at home, and rental value of dwellings, but does not include an adjustment for inventory changes.

2/ Represents the net after deducting from gross farm income all production expenses except wages and perquisites to hired labor. Thus it is the net income from farming to operator families and hired workers.

Income of farm laborers from wage received in agriculture cannot be adequately examined from over-all data on wage expenditures but must be supplemented with information relating directly to earnings of farm laborers. An estimate of the average amount of wages paid out per "man-year" of hired labor is obtainable from the estimates of total wage expenditures and of hired employment. However, this is quite a different figure from the actual average earnings of individual farm laborers, for hired farm workers generally do not average 12 months of work on farms. Information on actual earnings of hired farm laborers is given in Chapter 7.

Wages as an Expense of Production

Changes in farm wage rates can affect actual production expenses only in the outlays made for hired labor. ^{1/} The effect of changes in wage costs on total production expenses depends on the proportion that wages comprise of all such expenses. The relative importance of wages as an item of farm production expenses varies with type of farm, size of farm, among areas, and over a period of time. So far as costs of production exert pressure on farm prices of agricultural commodities through producers' demands for higher prices to compensate for higher costs, the increase in total production expenses that can be associated with a given increase in wage costs is dependent on the ratio of hired labor costs to all production expenses. Thus, for example, if a farmer has to pay his labor 20 percent more in one year as compared with another, but if his expenses for hired labor make up only 20 percent of his total production expenses, the 20 percent increase in wage costs would result in only a 4-percent increase in his total production expenses.

From 1910 through 1934, the total farm wage bill showed a steady decline for each successive 5-year period in the percentage it made up of total production expenses, decreasing from 20.3 percent in 1910-14 to 14.0 percent in 1930-34 (table 24). But the smaller share of expenses for hired labor was accompanied by an increasing proportion of expenses for farm machinery and equipment (including motor vehicles), which rose from 10.6 percent of total production expenses in the period 1910-14 to 17.4 percent in the period 1930-34. With some recovery from the depression, both labor and machinery costs showed

^{1/} In an important sense, the real cost of production is not measured fully by the sum total of production expenses, which as customarily defined includes all direct operating expenditures and the overhead expenses for depreciation and maintenance of capital equipment. The total labor input is far greater than the man-hours or man-days of hired labor input, except on the very small proportion of farms which utilize hired labor almost exclusively. The input of the operator's and his family's labor, though not reckoned as an expense of production, does represent a "real" cost which the net returns from farming should reward if those engaged in agriculture are to attain an adequate level of living and to make the maximum contribution to the war in the production of food. In a strictly economic sense, however, the effects of wage rate changes on farm-production costs and farm income are limited to the actual wage expenditures for hired labor.

Table 24.-Distribution of total agricultural production expenses by major categories, 5-year averages, 1910-39, and annually 1940-43, United States

Period	Farm machinery and equipment costs																			
	Total					Wares and					Maintenance					and depreciation				
	Mil. Dol.	Pct.	Mil. Dol.	Pct.	Mil. Dol.	Mil. Dol.	Pct.	Mil. Dol.	Pct.	Mil. Dol.	Mil. Dol.	Pct.	Mil. Dol.	Pct.	Mil. Dol.	Mil. Dol.	Pct.	Mil. Dol.	Pct.	Mil. Dol.
1910-39	10,632	100.0	1,933	18.1	1,476	13.8	724	6.8	752	7.0	4,622	43.2	2,661	24.9						
1940-43	9,220	100.0	1,566	17.0	1,458	15.8	706	7.6	752	8.2	3,827	41.5	2,369	25.7						
1940	7,404	100.0	1,197	16.2	1,329	17.9	631	8.5	698	9.4	2,887	39.0	1,991	26.9						
1941	6,345	100.0	1,000	15.8	1,192	18.8	568	9.0	624	9.8	2,425	38.2	1,728	27.2						
1942	5,730	100.0	928	16.2	1,040	18.1	494	8.6	546	9.5	2,026	35.4	1,736	30.3						
1943	5,274	100.0	736	14.0	920	17.4	416	7.9	504	9.5	1,774	33.6	1,844	35.0						
1944	7,630	100.0	1,280	16.8	1,081	14.2	450	5.9	631	8.3	2,791	36.6	2,478	32.4						
1945-49	7,490	100.0	1,301	17.4	987	13.2	276	3.7	711	9.5	2,706	36.1	2,496	33.3						
1950-54	6,245	100.0	1,139	18.2	679	10.9	135	2.2	544	8.7	2,373	38.0	2,054	32.9						
1955-59	3,858	100.0	784	20.3	410	10.6	20	0.5	391	10.1	1,446	37.5	1,217	31.6						

1/ Includes purchased feeds, livestock, fertilizer, lime, and miscellaneous expenses.

2/ Maintenance or depreciation of buildings, taxes, farm mortgage interest, and rent paid to landlords not living on farms.

3/ Data for 1943 are preliminary.

increased percentages of total production expenses. Overhead costs, which had lagged behind income changes during the depression, eventually declined both in absolute amount and as a proportion of all production expenses in the 1935-39 period, when labor, machinery, and other operating costs were expanding.

For 1943, the total production expenses absorbed a smaller percentage of gross farm income than for any other year on record except 1917 and 1918 when the percentages were practically the same as in 1943. This, together with the record gross income level, resulted in the highest net income to operators ever realized. Only 47 percent of the gross farm income was required to meet the 1943 production expenses, as compared with 58 percent in 1940 and 48 percent during the years 1915-19. Thus although the wage bill in 1943 made up a larger proportion of production expenses than had been the case in any 5-year average since 1915-19, the proportion of the total gross farm income going to pay wages was smaller than in any of the 5-year averages between 1910 and 1939.

The relative importance of wage costs in agriculture varies considerably among areas and by size of farm business. Available Census and other data provided the basis for estimating total agricultural production expenses in major geographic divisions for farms classified by total value of products (table 25). Wage payments on all farms reporting some production averaged 10.6 percent of the total value of production and 17.5 percent of total production expenses for the United States during 1939. In the West North Central States, where general overhead costs and operation of farm machinery make up a large proportion of production expenses, labor costs represented the lowest proportion of total value of production and of total expenses, 6.8 percent and 10.2 percent, respectively. Extensive mechanization of farming operations in the West North Central States and the numerical importance of "family farms" are both factors in the low ratio of wage costs to other production expenses. At the other extreme were the Pacific States with wage costs showing the highest ratio. The production of crops that have high labor requirements, the large-scale farming operations, and the relatively high wage rates in the Pacific States led to hired labor costs which were 18.7 percent of the total value of production and 26.2 percent of total production expenses. Of the other major geographic divisions, only the East North Central and the East South Central States were below the national average in the proportion wage costs comprise of total value of production or of total expenses.

Within major geographic divisions, the relative importance of wage costs varies by size of farm business. In the South Central States, there is a steady upward progression in the importance of wage costs from the lowest to the highest value-of-production class as is shown in table 25. In these States the use of sharecroppers instead of hired labor accounts in part for the very low percentage of the total value of products going for the payment of hired labor on the farms with less than \$400 value of products--3.3 percent in the East South Central and 5.1 percent in the West South Central States. On farms with more than \$10,000 value of products per farm in 1939, however, these percentages become 23.6 percent and 16.2 percent, respectively.

In the other divisions the costs of hired labor are relatively more important in the lowest value group than in the next to the lowest, probably because the farms with value of production of less than \$400 represent a mixed

Table 25.-Wages to hired labor as percentage of total value of agricultural production and of total production expenses, by value groups of farms, United States and major geographic divisions, 1939 1/

Value group	: :United: New :States:England:Atlantic:Atlantic:Central:Central:Atlantic:Atlantic:Central:Central:Mountain:Pacific	: :Middle :North :South	: :East :North :South	: :West :North :South	: :East :North :South	: :West :North :South	: :East :North :South	: :West :North :South
Wages to hired labor as a percentage of total value of production								
All classified farms	10.6	15.5	14.0	8.7	6.8	11.5	7.4	10.9
\$1 - 399	6.8	18.1	15.2	8.2	6.4	6.4	3.3	5.1
400 - 999	5.6	13.4	8.8	5.7	4.8	5.4	3.5	5.4
1,000 - 2,499	8.0	11.3	9.5	6.6	5.6	8.8	8.1	10.4
2,500 - 3,999	9.8	11.0	9.5	8.5	7.0	13.7	12.4	13.8
4,000 - 9,999	13.0	14.4	16.1	10.2	8.0	19.7	18.2	16.1
10,000 and over	18.5	23.4	25.2	17.3	8.8	26.8	23.6	16.2
Wages to hired labor as a percentage of total production expenses								
All classified farms	17.5	23.9	22.4	14.3	10.2	22.8	16.6	20.1
\$1 - 399	9.0	17.8	13.9	7.3	4.7	12.2	8.2	9.1
400 - 999	11.0	18.7	15.0	8.9	6.1	15.2	11.0	14.2
1,000 - 2,499	13.7	18.5	16.7	11.6	8.5	19.9	17.2	19.3
2,500 - 3,999	16.0	16.8	16.4	14.6	11.5	24.4	21.4	21.0
4,000 - 9,999	20.0	22.7	24.1	16.9	13.0	27.7	24.8	23.7
10,000 and over	29.8	37.9	40.1	30.4	14.1	36.0	29.8	27.5

1/ Estimated from Census and Bur. Agr. Econ. data. Estimates for "all classified farms" are adapted from Harry C. Norcross, State Estimates of Expenses and Net Income from Agriculture, 1929, 1939-42, Bur. Agr. Econ., May 1944, with minor modifications to make them comparable with the estimates by value groups of farms.

group of semi-homestead low income farms, some part-time and retirement units, and some farms that had partial crop failure in 1939. Beginning with the group of farms with value of production of from \$400 to \$1,000, there is a clear upward trend in the importance of wage costs (relative to total value of production or to total production expenses) shown by the successively higher value-of-products classes. This is true in the case of all divisions except the New England and Mountain States where the upward trend begins in higher value-of-products classes.

These marked differences in the importance of wage costs on farms of different size of enterprise confirm the point made in Chapter 1—that statistics for "all farms" are not satisfactory for analysis of relationships between wage costs and net income, when the data regarding income and expenses should relate to those farms which are actually "hiring" farms. For comparison of wage costs with other expenses and with net income, estimates are presented in table 26 for the farms in each major geographic division with total value of products per farm of \$4,000 or more in 1939. ^{2/} For the United States as a whole, the gross farm income from these farms (excluding Government payments and rental value of dwelling) is estimated to have been distributed as follows: 15.7 percent to hired labor, 48.1 percent for other production expenses, and 36.2 percent as net income to farmers. Thus of the \$8,959 total value of production per farm (exclusive of Government payments) in these income groups on the average, \$1,404 went to pay for 2.7 man-years of hired labor at \$521 per man-year, \$4,307 went to pay for all other production expenses, and \$3,248 was left for the farmer as the net return for his own and his family's labor and management and for his capital investment, or \$2,305 for family labor and management alone.

On the farms with a gross value of production of \$4,000 or more in 1939, the average percentage of the gross value of production which went to hired labor varied greatly by geographic divisions, from 8.3 percent in the West North Central to 23.4 percent in the South Atlantic, and 21.0 percent in the Pacific States. All other production expenses in the several divisions were close to the United States average of 48 percent, except in the West North Central and the East South Central, where they came closer to 55 percent. Net returns ranged from 24.2 percent in the East South Central to 40.6 percent in the East North Central.

The wage costs per man-year of hired labor reflect the broad geographic differentials in farm wage rates, with the Southern divisions having the lowest costs, averaging \$348 in 1939, and the Pacific States having the highest, \$713. As the estimated man-years of family labor including that of the operator was very close to 1.0 on such farms (with total value of production per farm of \$4,000 or more in 1939), the wages paid for a man-year of hired labor can roughly be compared with the average net income from farming received during the year by the farmers who were hiring the laborers. On these "hiring" farms, the net returns to the farm family in 1939 averaged \$3,138 in the three Southern divisions and \$4,161 in the Pacific States. If an allowance is deducted for a return on capital invested, the estimated net returns per farm for family

^{2/} See Chapter 1, p. 20 for a discussion of these farms as "hiring" farms.

labor and management on farms with gross value of products of \$4,000 or more in 1939 were \$1,668 in the Southern Divisions and \$3,291 in the Pacific States. These figures illustrate for an important group of farmer-employers ^{3/} the wide spread in average net income received by them and that received by their hired farm laborers—a spread which is greatly understated when all farm averages are used to represent the farmer-employer's position in appraising his ability to pay wages.

Type-of-Farm Differences in Hired Labor Costs ^{4/}

Information on the variations in the importance of hired labor costs by type of farm is available only from special studies in limited areas. The results of certain studies are summarized in table 27. Costs of hired labor account for more than 30 percent of total production expenses on the North Carolina and Virginia fruit farms, but only 21 percent on the Virginia tobacco farms and 7 percent on the Indiana cash-grain farms. Several factors accounted for these differences. Variations in the amount of hand labor required in growing and harvesting the crop, or conversely the extent to which farm operation have been mechanized, together with the particular production requirements of the crops grown, account for some of the differences in the proportion that hired labor costs represent of total production expenses. Thus, Indiana cash-grain farms have been mechanized more than the fruit farms of Virginia and North Carolina, the Virginia tobacco farms, and the Texas cotton farms. This is particularly true with respect to harvest operations.

Some of the variations in the relative importance of hired labor on the farms studied are due to differences in scale of operations since a family-size farm of a given type would have a smaller proportion of its production expenses represented by wage costs than would a large-scale farm of the same type.

The distribution of man-labor requirements through the year and the size of the farm business are fundamental factors in determining how much of the labor requirements can be met by the farm family, and hence the proportion of labor it is necessary to hire. A large part of the yearly labor requirements is concentrated during relatively short harvest periods on the fruit, potato, and cotton farms. Much hand labor is required during these periods and it is necessary to hire most of the harvest labor. Thus from 60 percent to more than 75 percent of the labor on the farms studied in the selected areas is hired. Labor requirements for harvesting, curing and preparing for market on Virginia tobacco farms are spread out over a longer period than is the case in harvest-labor requirements on fruit, potato, and cotton farms. As a result, it is possible for family labor to do more of the work.

^{3/} Eighty-five percent of the farms with a value of products of \$4,000 and over in 1939 hired labor and paid out 54 percent of the country's cash farm wage bill.

^{4/} This section of the chapter was contributed by Glen T. Barton.

Table 27.-Expenditures for hired labor in relation to production expenses, by type of farm, for selected areas and years ^{1/}

Type of farm and area	Year	Expenditures for hired labor	
		Percent of	
		total	
		Amount spent	production
		per farm	expenses ^{2/}
		Dollars	Percent
<u>Fruit</u>			
North Carolina - Sand Hill	1933	2,125	33
Virginia - Albermarle	1935	2,737	31
<u>Potato</u>			
Virginia - Eastern	1929	1,182	22
<u>Tobacco</u>			
Virginia - Pittsylvania	1936	214	21
<u>Cotton</u>			
Texas - High Plains	1936	506	18
<u>Dairy</u>			
Indiana - Northwest	1939	375	11
Virginia - TVA Drainage area	1941	689	15
<u>Livestock</u>			
Nebraska - Dakota	1940	581	16
Illinois - McLean	1941	330	8
<u>General</u>			
Indiana - Northeast	1939	204	8
Illinois - East Central	1941	486	11
<u>Cash Grain</u>			
Indiana - Western	1939	313	7

^{1/} Data taken from farm income studies by State and Federal agencies.

^{2/} Production expenses as used in this table include an allowance for net returns on capital investment.

On the general, family-size farms and on many livestock farms in the Corn Belt, expenditures for hired labor make up about 10 percent of all production expenses. Labor requirements are spread fairly evenly through the year, crop operations are mechanized, and family labor can supply most of the labor input except for hired help during peak harvest seasons. Many dairy farms present a similar picture.

For each type of farm, however, as the size of the business increases--in terms of acres of crops, number of dairy cows, etc.--hired men become necessary and costs of hired labor assume an increasing proportion of total production expenses. Large as is the variation in the relative importance of wage costs in production expenses among types of farms, the range of variation is still greater in the case of individual commodities. Tobacco, cotton, sugar beets, and peanuts are examples of crops which, on the average, have a larger part of their production expenses for hired labor costs than do, for example, the grain and hay crops.

The relative importance of the costs of hired labor varies over a period of time. The estimates in table 28 indicate their changing importance during the last three decades on four types of farms. The farms for which the estimates were developed are considered typical family-operated commercial farms of the type and in the area specified. The estimates were developed in such a way as to reflect changes over a considerable period in size of farm and patterns of production for family-operated commercial farms.

The wheat farm and hog-dairy farm present contrasting pictures of change. The relative importance of hired labor costs has declined on the wheat farms, as have total hours of labor required to operate the typical wheat farm. At the same time, the size of business, as measured by total output, doubled on the typical wheat farm from 1910-14 to 1940-42. This is primarily a result of the almost complete mechanization of wheat production and the accompanying increased production per worker. The typical hog-dairy farm, on the other hand, has shown about a 50-percent increase in the size of its business, but a less than proportionate increase in total hours of labor required. Both the proportion that hired labor costs are of total production expenses and the proportion that hired labor input is of total labor input have more than doubled over the period.

The estimate for the New York dairy type of farm and for the Corn Belt hog-dairy farm show a rising trend in the size of farm business and an increasing ratio of the costs of hired labor to total production expenses. However, total hours of labor required have increased proportionately less on the New York dairy farm than on the Corn Belt hog-dairy farm. The importance of hired labor as an item of production expenses on the Georgia cotton farm has decreased since the 1910-14 period as has the size of business and the total labor input. The latter have resulted from a decline in acres of cotton on the typical farm, brought about chiefly by the ravages of the cotton boll weevil in the early 1920's.

Table 28.-The changing importance of hired labor costs in relation to total production expenses, on family-operated, commercial farms, four specified types of farms, selected periods 1/

Type of farm and item	Unit	1910- : 1914	1920- : 1924	1930- : 1934	1935- : 1939	1940- : 1942
Wheat farm - Winter wheat area						
Hired labor cost as a percentage of total production expenses	Percent	8.7	13.9	5.2	2.6	2.4
Total man-hours of labor	Hours	3,913	4,556	3,777	3,056	2,012
Man-hours of hired labor as percentage of total hours of labor	Percent	13.6	22.5	15.2	8.0	5.7
Index of production (1910-14=100)	Percent	100	157	198	145	201
Hog-dairy farm - Corn Belt						
Hired labor cost as a percentage of total production expenses	Percent	8.9	12.4	12.7	13.2	19.1
Total man-hours of labor	Hours	4,685	4,834	5,085	5,053	5,406
Man-hours of hired labor as percentage of total hours of labor	Percent	13.1	15.9	21.6	22.5	28.5
Index of production (1910-14= 100)	Percent	100	108	122	125	151
Dairy farm - New York						
Hired labor cost as a percentage of total production expenses	Percent	7.8	11.5	8.8	8.7	13.3
Total man-hours of labor	Hours	4,778	4,334	4,725	4,745	5,057
Man-hours of hired labor as percentage of total hours of labor	Percent	11.6	13.4	12.8	14.2	20.1
Index of production (1910-14 = 100)	Percent	100	110	127	129	150
Cotton farm - Georgia						
Hired labor cost as a percentage of total production expenses	Percent	12.7	3.9	6.3	5.0	6.4
Total man-hours of labor	Hours	4,106	3,421	3,479	3,519	3,566
Man-hours of hired labor as percentage of total hours of labor	Percent	16.3	4.8	7.8	7.1	9.1
Index of production (1910-14 = 100)	Percent	100	55	73	74	84

1/ These estimates relate to typical or "modal", commercial, family-size farms. For method of deriving the estimates, see Wylie D. Goodsell, Farm Adjustments and Income on Typical Corn Belt farms, U. S. Dept. Agr., Circular No. 688, November 1943. Production expenses as used in this table include an allowance for net returns on capital investment.

These studies indicate the variability to be found in agriculture in the effect of changes in wage rates on production expenses, and on net farm income. Even a substantial increase in wage rates can have only a minor effect on total production expenses on farms where hired labor costs make up only a small fraction of such expenses. However, on farms where hired labor costs comprise substantially larger proportions of total expenses, a similar increase in wage rates could seriously affect the farmer's net income and his ability to keep on farming. Farm operators for whom hired-labor costs are an important item are naturally very sensitive to changes in farm wage rates. Farmers on many family-sized farms, whose operation requires only a few days of extra hired labor at peak seasons, are not appreciably affected even by marked increases in farm wage rates.

CHANGES AND DIFFERENTIALS IN FARM WAGE RATES IN
RELATION TO ASSOCIATED FACTORS

The composite monthly farm wage rate for the country as a whole averaged \$65.45 during 1943, and it is still rising. Although this figure is low when compared with current wage rates of almost any other industry, it is the highest farm wage rate on record and represents a 114-percent increase since the pre-war year 1939.

On April 1, 1944 the farm wage rate index was 292 percent of the 1910-14 average. The previous record high was in 1920 during the boom following World War I, when the national index of farm wage rates was 242 percent of the 1910-14 average.

This rise in farm wage rates during World War II, which occurred at a more rapid rate than during the period of World War I, invites an examination of present and past relationships between wage rates and the factors that normally determine the level of farm wage rates. It raises the question of whether the factors responsible for boosting wage rates to their present levels are the same in wartime as those which affect farm wage rates in peacetime. It calls for an examination of the dynamics of farm wage rates.

The great differences among regions, States, and areas within States in their present levels and in recent changes of farm wage rates likewise give rise to questions of why such differentials exist within our Nation, and whether they are likely to persist. The recent rise in farm wage rates, while recognized as a sorely needed gain for a disadvantaged group in our economy, raises immediately the question of whether farmers can afford to pay such wages. An examination of the current situation regarding farm wage rates in the light of the past, and an examination of these related aspects form the subject matter of this chapter.

Farm Wage Rates in Brief Review

The course of farm wage rates during the 30 years preceding the outbreak of the present war was marked with two great impacts: (1) The first World War and the decade following when farm wage rates were relatively high and (2) the depression during the first half of the 1930 decade. Although farm wage rates were considerably higher during the last 5 years than the first 5 years of this 30-year period, these two phases--one of relative prosperity and one of severe depression--completely overshadowed any clear manifestation of upward trend in farm wage rates. Since the outbreak of the present war, however, the rise which began as a recovery from the depression of the early 1930's has continued to a level which tops all previous experience in every area of the country, with the 1943 average monthly wage rate 90 percent above the average rate for the 1910-39 period (table 29).

Table 29.-Composite farm wage rates, United States and major geographic divisions, 1910-39 period and 1943 1/

Area	:Composite farm wage : : rate 1943		:Number of years dur- : ing 1910-39 when com- : posite wage rate was:		:Highest average : composite wage : rate during : 1910-39 2/		:Lowest average : composite wage : rate during : 1910-39 3/			
	:	:	:Composite:posi	te wage rate was:	:	:	:	:		
	:	:	: monthly :	:More :More	:	:	:	:		
	:	:	: farm wage:Within :than 20:than 20:	:Per-centage: :of 1910- : 39 : Per : of 1910-39	:	:	:	:		
:	:	:Percentage: rate, :20 per-:percent:percent:	:	:	:	:	:			
:	:	: of 1910-39:average :cent of:below :above : Per : 39 : Per : of 1910-39	:	:	:	:	:			
:	:	:Per month: average :1910-39 :average:average:average: month :average : month :average	:	:	:	:	:			
	Dollars	Percent	Dollars	Number	Number	Number	Dollars	Percent	Dollars	Percent
United States	65.45	189.6	34.52	9	11	10	59.88	173.5	21.10	61.1
New England	88.00	180.8	48.68	12	8	10	69.80	143.4	29.40	60.4
Middle Atlantic	74.23	177.0	41.94	9	11	10	64.60	154.0	26.40	62.9
East North Central	68.30	181.9	37.54	10	10	10	62.70	167.0	20.80	55.4
West North Central	72.90	196.2	37.16	15	7	8	70.20	188.9	19.20	51.7
South Atlantic	40.10	159.2	25.19	10	11	9	44.60	177.1	15.40	61.1
East South Central	37.80	159.3	23.73	10	10	10	43.10	181.6	13.90	58.6
West South Central	52.70	183.4	28.74	12	10	8	55.40	192.8	17.40	60.5
Mountain	84.50	197.5	42.79	19	6	5	73.90	172.7	25.80	60.3
Pacific	126.50	233.0	54.28	10	11	9	87.70	161.6	34.90	64.3

1/ The composite rate is the weighted average monthly wage of the rates per month and the rates per day converted to a monthly equivalent.

2/ Relates to the 12-month average of 1920.

3/ Relates to the 12-month average of 1933 except in the New England and Middle Atlantic divisions where the lowest rate was in 1910.

The current farm wage rates show great differences between States and regions. The weighted average of day and month rates prevailing in the Pacific States in April 1944 was more than three times as great as that in the East South Central States. Among individual States, differentials are even more pronounced. California's average month with board farm wage rate of \$1.28 in April 1944 was nearly five times as great as South Carolina's rate of \$27, while the day rate without board in Washington of \$7.20 was four times as great as the rate of \$1.80 in South Carolina.

In the 30 years between 1910 and 1939, the composite monthly farm wage rate averaged \$34.52 for the United States as a whole. The most marked regional differences were between the Pacific States which had an average rate of \$54.28 and the East South Central States with an average of \$23.73. In about a third of the 30 years, rates for the United States and for most of the major geographic divisions were within a 20-percent range of their average for the period; in about a third they were 20 percent or more above their average; in the remaining third they were 20 percent or more below their average. In every division the peak year was 1920, when the wage rate for the United States stood at \$59.88, or 73.5 percent above the 30-year average, and in all but two of the divisions the low year was 1933, when the national monthly farm wage rate fell to a level of only \$21.10.

Although all regions showed the same general pattern of movement in farm wage rates during this period, the swing up to the 1920 level and downward to the 1933 level was more extreme in the West North Central States than in any other region and least extreme in the New England States. The wide fluctuations in income from wheat and other grains in the West North Central as contrasted with the relatively more stable income from dairy, fruit, and vegetable products are partly responsible for these and other regional differences in wage trends. During the last 4 years, the Pacific, Mountain, and West North Central States have shown the highest percentage rise over the 1910-39 average, with the three Southern divisions showing lower percentage increases than the United States as a whole. Thus the divisions with the highest wage rates had the greatest increase by 1943 and those with the lowest wage rates had the least increase.

Farmers, even more than farm laborers, have had marked economic gains in the last 4 years. Since 1939, cash income from farm marketing has risen from 7.9 billion to 19.3 billion in 1943; an increase of 144 percent as compared with the increase of 114 percent in the level of farm wage rates (table 30). Expenses of production have risen much less than the gross income so that the net income realized by operators from farming operations increased from 4.5 billion dollars in 1939 to 12.1 billion in 1943, a gain of approximately 170 percent. The national net farm income in 1943, moreover, was received by a smaller number of farmers and of farm family workers than in 1939, so that the per farm or per family worker income showed even greater increases.

In the Pacific States, the composite monthly wage rate nearly kept pace with the gross cash farm income in terms of percentage change from 1939 to 1943 (table 30). In the Middle Atlantic States farm wage rates increased relatively more during this period than cash farm income. In the East South

Table 30.--Composite farm wage rates 1/ 1939 and 1943 and percentage increase in cash farm income 2/ from 1939 to 1943, for United States, geographic divisions, and States.

Area	:Composite monthly farm wage:Increase in cash			
	:	:	:	: farm income
	: 1943	: 1939	: Increase	: 1939 to 1943
	Dollars	Dollars	Percent	Percent
United States	65.45	30.56	114	144
New England	88.00	47.10	87	93
Maine	88.50	40.48	119	126
New Hampshire	85.20	47.47	80	76
Vermont	79.90	41.44	93	87
Massachusetts	91.40	49.71	84	85
Rhode Island	97.60	53.79	81	66
Connecticut	89.00	51.49	73	88
Middle Atlantic	74.23	37.10	100	91
New York	79.40	37.48	112	92
New Jersey	82.10	42.15	95	90
Pennsylvania	65.30	34.70	88	90
East North Central	68.30	34.40	98	135
Ohio	61.30	32.84	87	117
Indiana	63.00	32.17	96	143
Illinois	71.30	37.02	93	135
Michigan	71.50	34.92	105	113
Wisconsin	72.00	33.81	113	163
West North Central	72.90	30.70	138	184
Minnesota	74.30	33.68	121	157
Iowa	78.20	35.17	122	174
Missouri	50.40	24.89	102	160
North Dakota	92.20	30.34	204	288
South Dakota	78.60	30.59	157	240
Nebraska	74.20	28.14	164	197
Kansas	68.90	28.37	143	188
South Atlantic	40.10	21.40	87	131
Delaware	70.10	33.67	108	220
Maryland	63.80	33.71	89	115
Virginia	47.30	26.51	78	136
West Virginia	47.70	27.29	75	101
North Carolina	43.10	21.78	98	128
South Carolina	29.80	15.55	92	100
Georgia	31.20	15.80	98	154
Florida	47.50	22.01	116	133
East South Central	37.30	19.80	91	157
Kentucky	46.70	24.89	88	140
Tennessee	38.00	20.27	88	154
Alabama	34.90	17.00	105	187
Mississippi	34.90	17.88	95	157

(continued)

Table 30.--Composite farm wage rates 1/ 1939 and 1943 and percentage increase in cash farm income 2/ from 1939 to 1943, for United States, geographic divisions and States (continued)

Area	: Composite monthly farm wage: Increase in cash			
	: 1943 :		: 1939 :	
	: Dollars :		: Dollars :	
			Percent	Percent
West South Central	52.70	23.70	122	137
Arkansas	23.30	20.22	114	139
Louisiana	37.90	20.02	89	113
Oklahoma	59.80	26.88	122	123
Texas	59.20	25.41	133	148
Mountain	84.50	38.30	121	138
Montana	99.70	41.15	142	181
Idaho	98.10	33.32	194	146
Wyoming	84.20	38.41	119	84
Colorado	76.50	32.71	134	143
New Mexico	60.80	29.98	103	114
Arizona	83.10	39.82	109	147
Utah	91.90	45.82	101	126
Nevada	84.40	43.51	94	85
Pacific	126.50	51.40	146	152
Washington	130.00	45.74	184	170
Oregon	120.00	43.81	174	146
California	126.00	54.81	130	148

1/ The composite rate is the weighted average monthly wage of the rates per month and the rates per day converted to a monthly equivalent.

2/ Income from sales of farm products excluding Government payments.

Central division, where rates are generally lowest in the United States, wage rates increased 91 percent while cash farm income increased 157 percent. In three-fourths of the States, the percentage increase in cash farm income exceeded that in farm wage rates between 1939 and 1943. Some of the richer farming States closely resembled some of the poorer ones in showing a much more rapid rise in cash farm income than in farm wage rates.

Current and Past Relationship of Farm Wage Rates
with Income and Other Factors

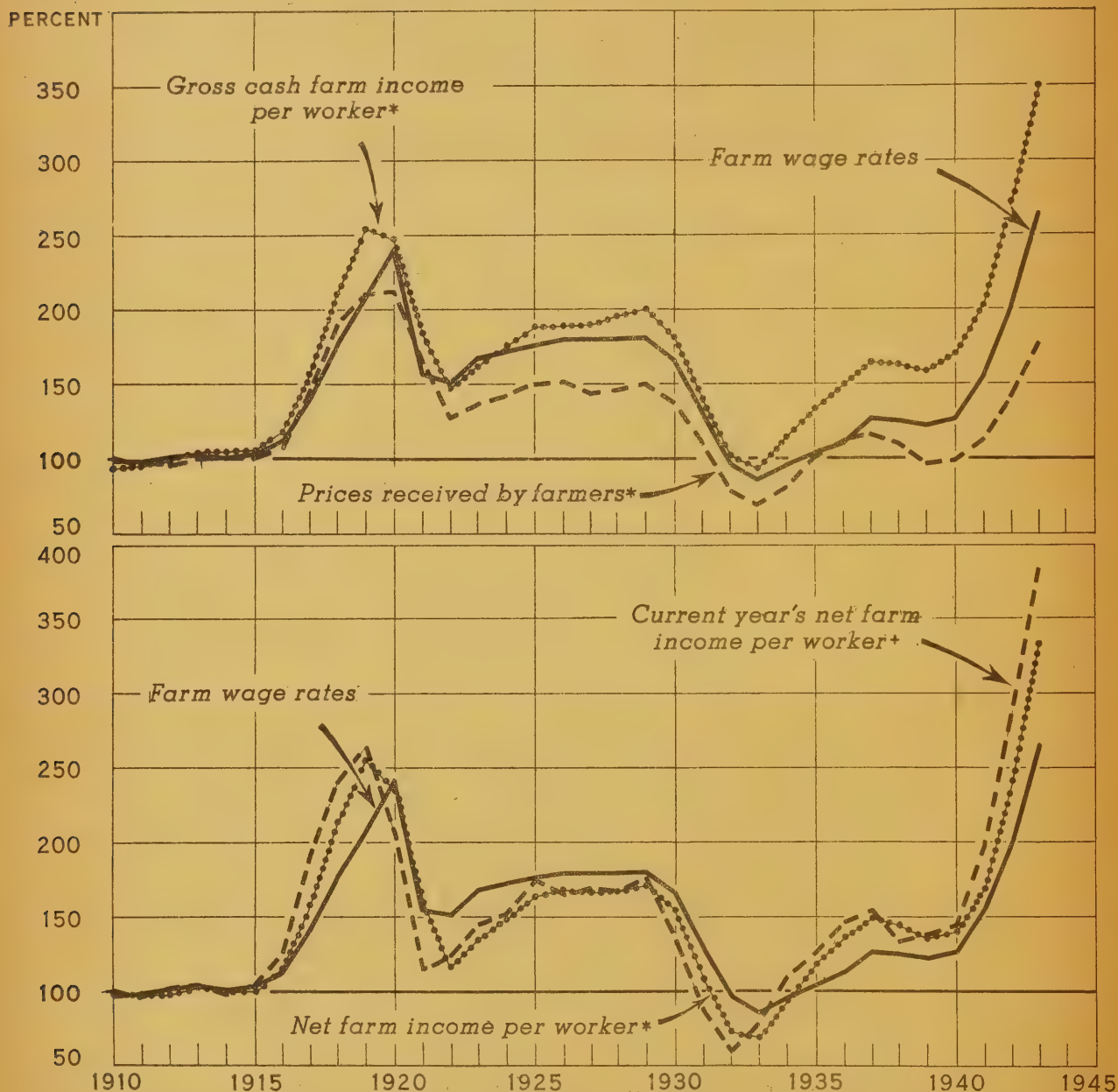
Of the various factors associated with changes in farm wage rates, farm income and farm prices have received the most attention. Farm income not only determines the farmers' ability to pay a given wage rate, but also is closely correlated with other important factors making for changes in wage rates, such as the level of prices received by farmers, wages and earnings of industrial workers, the level of nonagricultural activity and employment (and thus indirectly with the available labor supply). The United States index of farm wage rates shows a closer correlation with farm income (on a gross or net, total or per worker basis) than with prices received by farmers ^{1/} (fig. 10). Yields and volume of sales at the prevailing prices have an important contributing effect on the wage rate level. The net income of farmers under given price conditions changes more than proportionately with changes in volume of sales, because of the high proportion of fixed costs in agricultural production. Moreover, since the available wage rate index is essentially a measure of the price for a unit of time ^{2/}, whereas the price index is a measure of price per unit of product, any changes in labor productivity which altered the labor time

^{1/} For the period 1910-43 the percentage of variation in farm wage rates associated with variations in gross cash farm income per worker (or the square of the correlation coefficient) is 89 percent, with net farm income per person engaged in agriculture 85 percent, and with prices received by farmers 79 percent. (The net farm income to persons engaged in agriculture is the net income realized by farmers plus the farm wages received by hired workers. This total, when divided by the average annual farm employment, provides the net income per worker measure used in this analysis.) That the existing index of farm wage rates has a closer inherent relationship to farm income than to farm prices is even more strongly suggested by the correlations of real farm wage rates (adjusted for changes in cost of living) with real net farm income per person engaged in agriculture and with real prices received by farmers (adjusted for changes in prices paid by farmers, including interest and taxes). The square of the former correlation coefficient is .61 and of the latter is .21. These correlations involved annual average wage rates for the current year with the average of the current and preceding year's income or prices so as to allow for the observed lag in response of wage rates to price and income changes.

^{2/} The unit of time is a month, as the day rates are converted into a monthly equivalent in the computation of the index.

FARM WAGE RATES, PRICES RECEIVED BY FARMERS, AND FARM INCOME PER WORKER, UNITED STATES, 1910-43

INDEX NUMBERS (1910-14=100)



* AVERAGE OF CURRENT AND PRECEDING YEAR'S INDEX

+ GROSS FARM INCOME LESS ALL PRODUCTION EXPENSES EXCEPT FOR WAGES AND FOR RENT PAID TO LANDLORDS LIVING ON FARMS DIVIDED BY ANNUAL AVERAGE TOTAL FARM EMPLOYMENT.

FARM INCOME ESTIMATES FOR 1943 ARE PRELIMINARY

FIGURE 10

required per unit of product led to changes in the wage rate-price relationships within the time span considered, thus lowering the degree of correlation for the 1910-43 period. In figure 10 indexes of farm income have been converted to a per worker basis so as to provide a measure somewhat more appropriate than aggregate income for comparisons with the wage rate index. Since wage rates tend to lag behind farm price and income changes, the price and income indexes shown in figure 10 represent averages of the current and preceding year's indexes. These averages in effect allow a 6-month lag in the response of wage rates to price and income changes. This lag appears to be sufficient to synchronize the wage-price-income changes at nearly all turning points of the last 33 years.

Historically, changes in farm wage rates have followed fairly closely the changes in the lagged farm income per worker on a gross or net income basis, although the relationship was not uniform throughout this period. The slightly higher association of wage rates with gross than with net farm income probably reflects greater awareness on the part of farmers of gross cash receipts than of a net income which results after subtracting all production expenses including many non-cash and overhead costs.

There are distinct differences in the price-wage and income-wage patterns of movement shown in figure 10. In the period of World War I, farm wage rates rose at approximately the same rate as prices received by farmers through 1919 and reached a peak in 1920 which was at a considerably higher level relative to 1910-14 than the highest point in the price index during this period. Wage rates, however, did not rise as fast or to as high a level as either gross or net farm income per worker in the period 1914-20.

In the sharp depression following World War I (1921-22) farm wage rates did not decline as much as farm prices or as net farm income per worker, but did decline just as much as gross cash farm income per worker. The major difference to be noted between the wage-price pattern and the wage-income pattern is the fact that for nearly all years beginning with the early 1920's the wage rate index has remained above the price index (relative to 1910-14) but below the gross cash farm income per worker.

The wage rate index stayed somewhat above the lagged index of net farm income per worker from 1922 through the depression of the early 1930's, but has remained below it every year from 1935 through 1943. The disparity between net farm income and farm wage rates in favor of the former widened considerably between 1935 and 1937, narrowed slightly by 1939, but with the sharp wartime rise in farm income by 1943 has widened to a greater extent than at any previous time.

Farm wage rates tend to lag behind changes in farm income on both the upswing and the downswing of income conditions. They lagged behind the farm income during the 1915-19--years of the first World War--but did not start to decline until a year after the 1919 peak in income was passed. From the depression low, farm wage rates did not begin to rise until 1934, whereas farm income started rising in 1933. From 1933 to 1937, and again from 1940 to 1943,

wage rates did not increase as fast or as much as farm income, the lag being more noticeable in relation to gross cash income than to net farm income per worker. Thus far in the present war period, farm wage rates have lagged behind the gross and net farm income per worker to a greater extent than in the corresponding years of World War I.

On the basis of the average relationship between wage rates and gross or net farm income per worker prevailing during the whole 33-year period for which the information is available, with an allowance made for the usual time difference of about 6 months between changes in income and the response in wage rates, the level suggested for farm wage rates in 1943 by the income relationship alone was still somewhat above the actual level reached in 1943. 3/

Wage rates on farms are also influenced by factors other than farm income or prices received by farmers. The level of nonagricultural wages, employment and unemployment, and the volume of rural-urban migration are highly interdependent factors which affect farm wage rates by producing changes in the supply of available farm labor. A part of this supply consists of underemployed farmers and their families on subsistence or other farms with inadequate resources. When changes in the farm labor supply proceed in the same direction over a period of years, their cumulative effect becomes pronounced. For example, the effect of the marked increase in the labor supply which took place in the early 1930's extended through the rest of the decade, depressing the general level of wage rates on farms. The effect of the larger supply was augmented by a declining demand for labor on farms as a result of lower farm income levels and the increased use of farm machinery. The resulting increase in the farm labor supply-demand ratio which occurred between the 1920's and the 1930's probably had a greater effect in depressing the average wage level in the latter decade than did the year-to-year variations in farm income, prices, or industrial wages.

The course of movement of farm wage rates over the last three decades gives evidence of the slow but cumulative effect on the farm labor supply-demand ratio of changes in volume of nonagricultural employment, the annual farm-to-city migration, and the progress in mechanization of farming operations. Recent trends in these factors affecting the farm labor supply have been such as to make for an increase in wage rates over and above the increase expected from the rise in farm income. Despite the influence of these factors, wage rates in 1941, 1942, and 1943 have been at levels lower than those expected even on the basis of the 33-year average relationship with net farm income per worker. The relatively favorable bargaining position of farm laborers which the reduced supply has brought about has apparently not yet raised farm wage rates for the country as a whole above the point suggested by the long-time relationship between net income and wage rates.

3/ Comparisons on a concurrent-year basis between changes in farm wage rates and in farm income during a period of accelerated increase in income tend to exaggerate the divergence between the farm wage and income indexes. Actually farm wage rates cannot be expected to show an immediate response to changes in farm income since wage commitments in any year are in large part made before the realization of income from that year's production, and may be partly paid out of the preceding year's income.

Alternating cycles of agricultural prosperity and depression have been accompanied by varying degrees of disparity between farm income and farm wage rates, sometimes relatively more favorable to agricultural wage workers, as in most of the 1920's, and at other times relatively more favorable to farm operators, as since the middle 1930's. The period 1910-14 has been considered as one in which there was a fair balance in income position of farmers relative to that of other groups in the economy, and the reestablishment of a corresponding balance has long been the objective of public policies regarding farm prices and income.

In 1943 the level of farm wage rates was still about 20 percent under that which would have been reached if the 1910-14 ratio of farm wage rates to net farm income per worker had prevailed in 1943, even after allowance is made for the usual lag between wage rates and net farm income. Similarly, the farm wage rates in 1943 were about 25 percent under the wage level which would have been reached if the 1924-29 ratio of wage rates to net farm income per worker had held. ^{4/} The actual average farm wage rate in 1943 for the United States was 6 percent below the rate indicated by the 1935-39 ratio of wage rates to net farm income per worker, a period when farm wages were depressed by large urban and rural unemployment and by the restricted outmigration of farm people during the depression years.

Despite the sharply rising level of farm wage rates during 1943 and early 1944, it is doubtful whether the average wage rates for 1944 will exceed the levels suggested by the 1935-39 ratio of farm wage rates to net farm income per worker. The prospective 1944 average farm wage rates for the country as a whole will fall considerably short of reestablishing the 1910-14 or the 1924-29 ratio. Wage rates of farm workers in 1944 would have to average approximately 47 to 51 percent higher than in 1943 to reach the 1910-14 ratios of wages to net income per farm worker (family and hired) or per family worker, and even higher to reach the 1924-29 ratio. The corresponding 1935-39 ratios would require an increase in the annual average wage rates of 25 to 27 percent from 1943 to 1944. From April 1, 1943 to April 1, 1944 rates have increased 22 percent. Under present prospects as to the 1944 farm income level and other factors, it seems probable that the wage rates of farm laborers in 1944 may advance over the 1943 level by about 20 percent.

Current and past trends in farm wage rates in the various major geographic divisions have followed a pattern with respect to farm income which in general outline is similar to the national picture. The available farm income data are more limited for States and geographic divisions than for the country as a whole. Historical series are available only since 1924 and are limited to gross cash income. In six of the nine geographic divisions the wage rate level in 1943 was still below the level indicated by the 1924-43 average relationship between wage rates and gross cash farm income per worker. The Northeastern, North Central, South Atlantic, and East South Central divisions had average farm wage rates in 1943 that were 4 to 8 percent below the level

^{4/} The period 1925-29 has been suggested in a recent study as more appropriate than any other base period for parity considerations between industrial labor and agriculture. See John D. Black and C. A. Gibbons, "The War and American Agriculture," The Review of Economic Statistics, XXVI, Feb. 1944, pp. 20, 38.

suggested by their respective 1924-43 relationships with cash farm income per worker. In the South Atlantic division the actual average rate was farthest below the level so estimated, 8 percent as compared with 4 percent for the United States as a whole. In contrast, the Mountain, Pacific, and West South Central divisions had wage rates 3 or 4 percent higher than would have been expected on the basis of their historical relationships of wage rates and cash farm income per worker. This is due, no doubt, to a relatively more difficult labor supply situation in these areas, caused by a more rapid expansion of industrial employment in the Pacific States and by a larger relative out-migration from farms in the other two divisions. Not until 1943, however, did the wartime rise in farm wage rates lead to a level in any geographic division higher than that suggested by the 1924-43 relationship with cash farm income per worker.

There are some important differences in the historical trends of wage rates and cash farm income in the several geographic divisions. In the West North Central, West South Central, and Mountain States, for example, the variations in farm wage rates from year to year have generally followed closely the annual changes in cash farm income per worker throughout the 1924-43 period, when allowance is made for a half-year lag in wage rates. In the Middle Atlantic States farm wage rates tended to be at a higher level during the 1924-29 period and at a materially lower level throughout the 1935-40 period than the wage level indicated by the average relationship with cash farm income per worker for the whole 1924-43 period. A similar lack of correspondence between income and wage rates in the 1924-29 and 1935-40 periods also prevailed in the New England, East North Central, and Pacific States. In the South Atlantic and East South Central States wage rates likewise moved above the income level in 1924-29 and below the income level in 1935-40, but to a greater degree than in other parts of the country.

A possible explanation for this higher farm wage level in relation to farm income ^{5/} during 1924-29 may be found in the sustained high level of employment and wage rates in industry along with the cumulative effects of heavy outmigration from farms during the 1920's. A scarce supply of farm labor and relatively high industrial wage rates thus tended to sustain farm wage rates during these years. During most of the 1930's the opposite situation prevailed; extended unemployment and a slackened migration tended to depress farm wages. In addition, continued mechanization of farming operations over the several decades had reduced the labor requirements which aggravated the surplus labor supply situation. The relative intensities with which all of these factors operated in the various geographic divisions produced differences in the degree of wage-income disparities. In the West North Central States, for example, where the departure of wage rates from income was least in the two periods, net migration from farms declined considerably less between the 1920's and 1930's than in the South Atlantic division, where the wage disparities were greatest.

Changes in Real Farm Wages

Changes in levels of farm wage rates and net farm income per worker during the last 33 years, which appeared quite marked in figure 10 are greatly

^{5/} Either gross or net farm income per worker.

modified when the wage rates and net income are adjusted for changes in buying power of the farm laborer's or farmer's dollar. The level of real farm wage rates has been remarkably stable since 1910 (fig. 11). The correlation of farm wage rates with net farm income per worker is not nearly so close on an adjusted basis. Both respond to major cyclical changes, although the adjusted rates respond generally less than the adjusted net farm income per worker. In the first World War period real farm income per worker rose substantially above its pre-war level in 1917, 1918, and 1919, whereas real farm wage rates were above their 1910-14 average only in 1920, and in that year by just 9 percent. After the short depression of the early 1920's, when real farm income fell more rapidly than real farm wage rates, the adjusted index of farm wage rates in the years 1923-30 maintained a level averaging 10 percent above that of the 1910-14 period, while the adjusted index of net farm income per worker held a slightly lower relative level. After 1929, real farm income dropped much more rapidly than real farm wage rates, but it recovered more rapidly and has maintained a higher relative level from 1934 to the present.

The course of real farm wage rates during the 33-year period since 1910, even on an index-number or relative basis, suggests a pattern which would be expected of a substandard wage that has held to a subsistence level practically throughout the period. Although real farm wage rates showed little variation over the stretch of years 1910-30, they were stable at a level which yielded on the average an annual wage income per hired farm worker of only \$265 (in 1910-14 dollars), as compared with \$410 net farm income per farm family worker ^{6/} and a considerably higher amount per farm family worker on farms that hire labor. The fact that farm wage rates have declined in periods of depression relatively less than farmers' income is to some extent a function of the minimum character of incomes derived from farm wages, which could hardly have fallen lower and still provided earnings necessary for sheer physical subsistence.

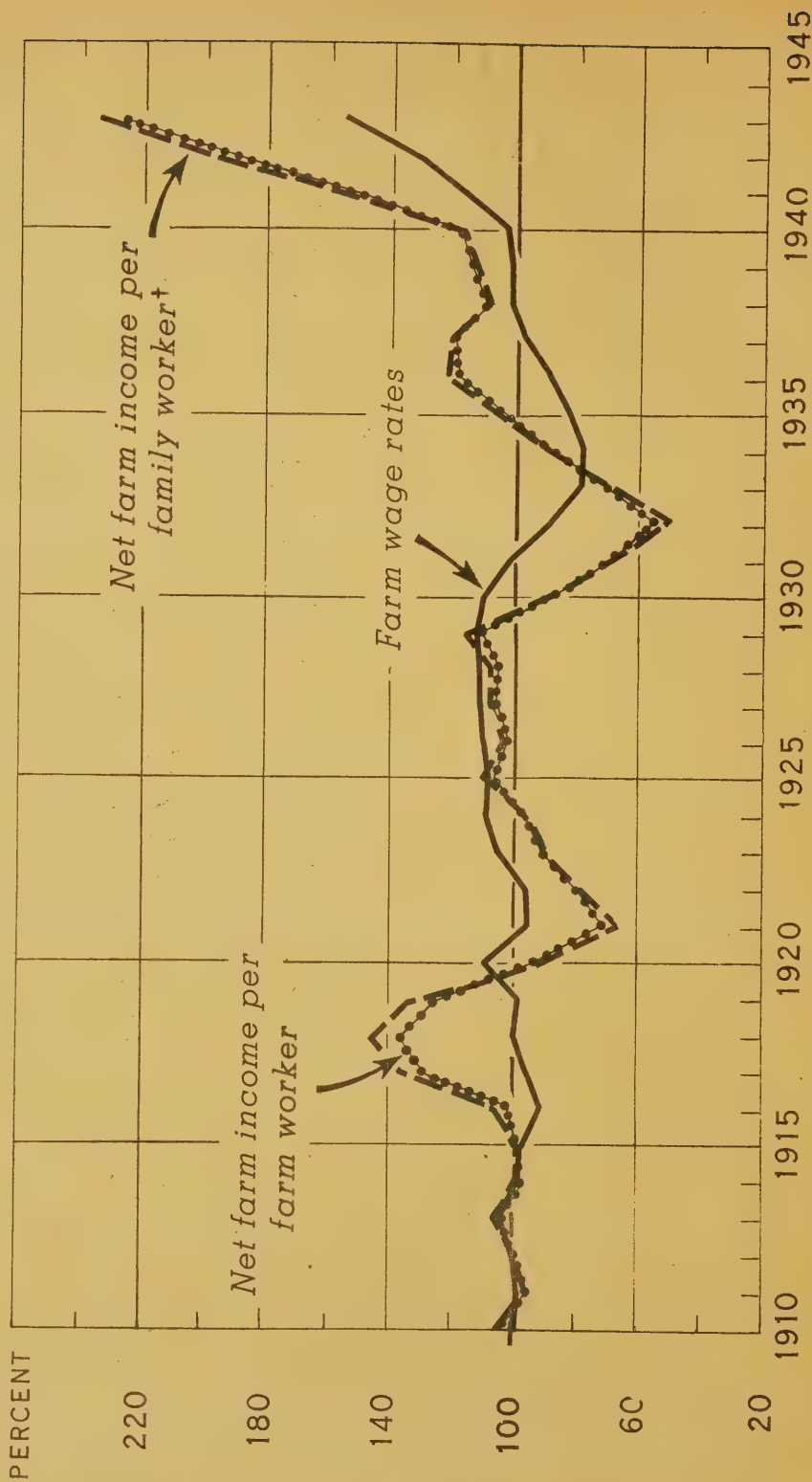
Evidence of the importance of the factor of labor supply in determining the level of farm wage rates may be found in the behavior of real farm wage rates in different periods of the last 33 years. ^{7/} During the 1920's the heavy migration from farms and the high level of nonagricultural employment led to real farm wage rates slightly higher on a relative basis than real farm income. Were it not for the rapid progress of farm mechanization during these years, which tended to reduce the demand for farm labor, farm wage rates might have risen to a higher level. When the depression hit, the farm labor supply became greatly augmented by return migration to farms and even more by suppression of the normal migration away from farms, contributing to a sharp reduction in adjusted farm wage rates. The cumulation of a large unemployed and under-employed labor reserve in rural areas during the first half of the 1930's meant that it was not necessary for farmers to pay much higher real wage rates when their own income began to improve, so the recovery in real farm wages was much slower than in real net farm income. Not until the period of national defense began and migration from farms drained off some of the surplus laborers

^{6/} See figure 21 in Chapter 9.

^{7/} The data on net farm income and changes in rural cost of living are not available by geographic divisions to permit a similar analysis at a regional level.

FARM WAGE RATES AND NET FARM INCOME PER WORKER AND PER FAMILY WORKER, ADJUSTED FOR CHANGES IN LIVING COSTS*, UNITED STATES, 1910-43

INDEX NUMBERS (1910-14=100)



* ADJUSTED BY THE INDEX OF PRICES PAID BY FARMERS FOR COMMODITIES USED IN FAMILY LIVING.

† INCLUDES FARM OPERATORS AND UNPAID FAMILY WORKERS.

NET FARM INCOME ESTIMATES FOR 1943 ARE PRELIMINARY.

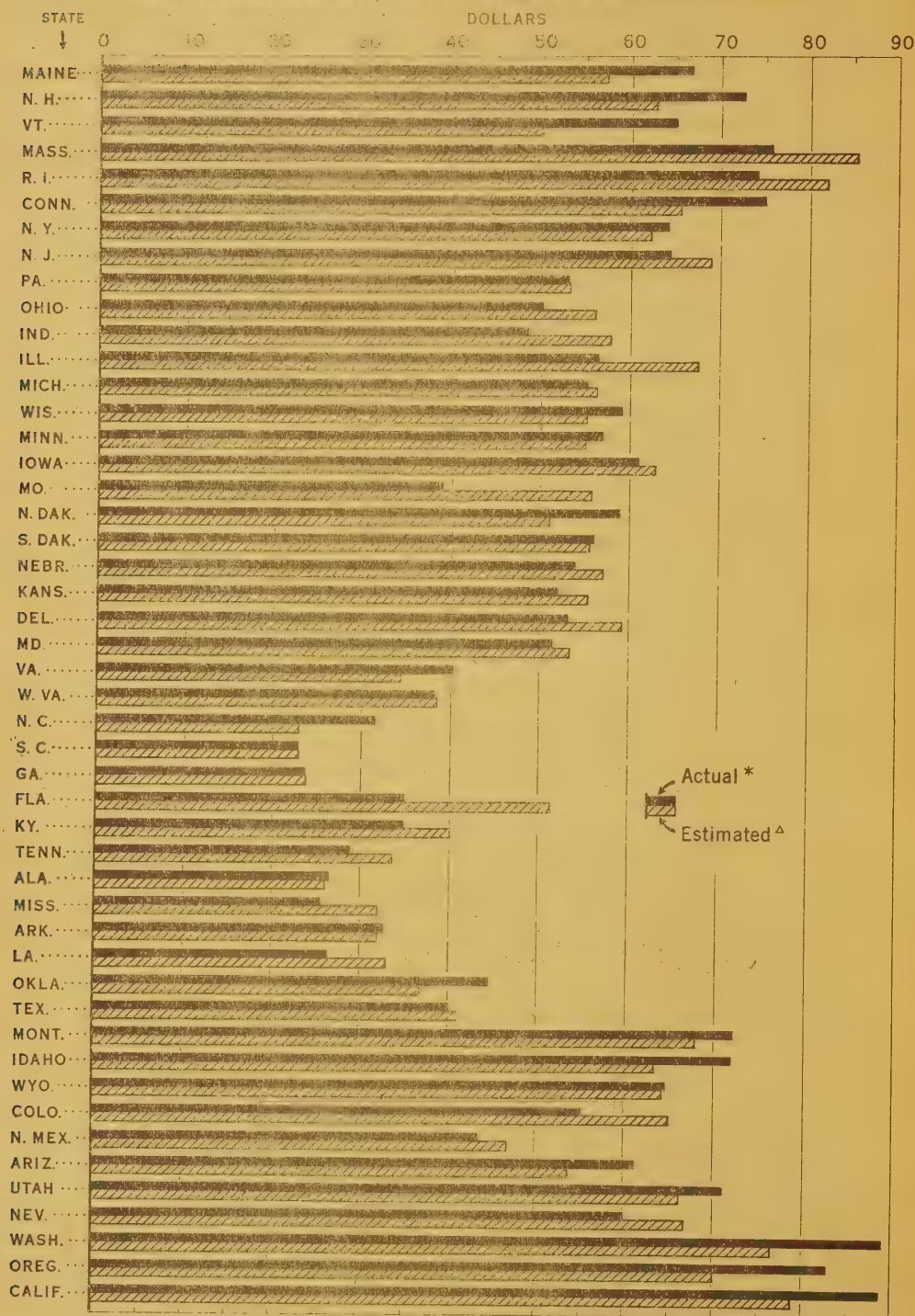
did real farm wage rates show any marked improvement. Although real net farm income per worker exceeded its 1929 level by 1936, real farm wage rates did not equal those paid in 1929 until the rather marked rise occurred between 1940 and 1941. The fact that real farm wage rates have at least partially followed the rise in real farm income since our entrance into the war, in contrast to the situation in World War I, is no doubt due in large part to a sharper reduction in the farm labor supply through migration during World War II than during World War I.

Factors Associated with State Variations in Farm Wage Rates

The factors associated with the changes in farm wage rates over time are also involved in explaining some of the differences in level of farm wage rates prevailing in the various States at any given time. State differences in income from agricultural production per worker, in the competitive wage rate level of nonagricultural occupations, in the labor supply on farms, and in the degree of dependence upon hired farm workers are some of the important factors. More than 80 percent of the variation between States in the July 1942 composite farm wage rates is associated with available measures of these factors. 8/ A comparison of the actual composite wage rates in the various States with the wage rates estimated from a correlation analysis of wage rates with these four factors is shown in figure 12. In a State where there is a relatively close agreement between the estimated and actual farm wage rate, it merely means that the State shows a wage differential in relation to other States of a magnitude which can be largely accounted for in terms of the State's relative situation with respect to the factors mentioned. 9/

8/ Based on a multiple-correlation analysis of July 1, 1942 composite farm wage rates with the following factors: (1) Cash farm income (including Government payments) per farm worker in 1941; (2) hourly entrance wage rates of common labor in industry, July 1942; (3) rural-farm persons (14 years of age and over) per farm not employed in nonagricultural occupations, April 1940; (4) proportion hired workers comprise of total farm employment, June 1, 1942. 9/ Even a full "explanation" of existing wage differentials among States would not imply that the States' actual levels of wage rates are necessarily equitable or justifiable, nor would it imply any optimum relationship to farm income or other measures of ability to pay. The underlying pattern of average relationships between farm income and wage rates at a given date may be generally out of line with ability-to-pay criteria; hence the actual levels of wage rates in States, even though their variations were explainable, would likewise be out of line. Moreover, an analysis directed toward an ability-to-pay appraisal of wage rates would not include the effects on wage-rate differentials of extraneous factors such as the labor supply and the wage rates in nonagricultural industries.

ACTUAL AND ESTIMATED COMPOSITE MONTHLY FARM WAGE RATES, FOR STATES, JULY 1942



* REPORTED BY CROP CORRESPONDENTS

^ ESTIMATED FROM A MULTIPLE LINEAR REGRESSION ON FOUR RELATED FACTORS; SEE FOOTNOTE 8, CHAPTER 5

If more adequate data were available for measuring the factor of labor supply and the factor of competitive nonagricultural wages, it is probable that a still fuller explanation of the variation in farm wage rates among States would be obtained. This would be particularly applicable in the case of the Pacific and most of the New England States where the influence of competing industrial wage rates is not adequately measured by hourly entrance rates of common labor in industry (the measure used in the analysis). In these areas the wartime industrial employment available to experienced farm workers includes many types of jobs at the semi-skilled and skilled levels, which are paid at considerably higher rates than common labor. Moreover supplementary income of farm operators from nonfarm employment in the New England and Pacific States probably results in a greater average difference than in other regions between net income from farming and the operator's total net income from all sources, which has a bearing on the farm wages he can afford to pay.

In general, the observed State differences in farm wage rates in July 1942 correspond fairly closely with differences in related factors. South Carolina with the highest value on the measure used to indicate the potential labor supply per farm, the lowest cash farm income per agricultural worker, of the lowest common labor wage rate in industry had the lowest farm wage rate of any State. In the Pacific States, especially in California, the high agricultural income per worker, high level of competitive wage rates in industry and high degree of dependence on hired workers all combine to produce the highest farm-wage-rate levels among the States.

The supply of labor actually or potentially available for farm work or for nonagricultural work has under present conditions a very important effect, directly or indirectly, on farm wages. Over wide sections of the South the wage rates are comparatively low as a result of a relatively large supply of labor. On the other hand, in some States the scarcity of labor available for farm work together with unusually high industrial wages has tended to raise farm wage rates to a level higher than would be expected on the basis of farm income considerations alone. The fact remains that farm wage rates for the country as a whole during 1942 and 1943 were still below a wage level indicated by the 1935-39 ratio of wages to net farm income per worker. Relevant data for geographic divisions suggest that the areas where the current farm wage rates are still below the level indicated by the 1935-39 ratio include Southern as well as North Central States. In these areas farm wage rates would need to advance materially to have a higher ratio to income than existed in the 1935-39 period, when the rates were low relative to the level of farm income.

Wage Rates in Relation to Farmers' Ability to Pay

The preceding analyses attempted to appraise current levels of farm wage rates for the country as a whole and for major geographic divisions in the light of historical relationships with farm income and related factors. However, determining a "normal" wage-income relationship from historical data means in effect an averaging together of periods with dissimilar conditions

and characterized by varying degrees of disparity between farm income and farm wage rates. Moreover, it was observed during the study that an appraisal of current wage levels in terms of their relationships to net farm income for any one of several selected 5-year periods leads to quite different results, depending upon the periods selected. Past relationships of wage rates to farm income do not tell us specifically what wage rates farmers were or are now able to pay. Although historical relationships are sometimes used as "norms" in appraising a given wage level, actually the wage levels prevailing in a past period do not necessarily indicate the levels which farmers could have afforded to pay.

In no phase of analysis of farm wage problems is the need for statistics on "hiring farms" greater than in considerations of ability to pay. The whole approach to the problem through index numbers of net farm income based on all farm averages (or on net income aggregates for all farms) involves two assumptions which need to be examined. ^{10/} One assumption is that net income per farm on the hiring farms changes from year to year by the same percentage that net income for all farms does. This assumption probably overstates the favorableness of the income position of the "hiring" farmer in times like the present: when net farm income has been rising rapidly and probably by greater percentage on the lower and middle income farms than on the farms of higher income. Yet the "all farm" aggregate income is so preponderantly from the higher income farms that its percentage change (or the "all farm" average percentage change) cannot differ greatly from the percentage change of the higher income farms, and therefore the degree of overstatement of the change in position of the hiring farms cannot be very important.

The other assumption is that recent or current changes in farm wages can be appraised on the basis of the past relationship with farm income as to whether or not they are in reality "in balance" with changes in farm income per worker or per farm. Such interpretation tends to place a normative evaluation--a "rightness"--on the relationships between the two series which have been observed over a past period of time. The fact of the matter is, however, that a wage level indicated by historical relationships with a measure related to ability to pay can be characterized as being "in line" or "in balance" with ability to pay, or as "fair and reasonable" only on the ground that "that's the way it was in period such and such," or "that's the way it 'always' has been". Obviously this does not prove that that's the way it could or should be.

Before judgments could fairly be passed on whether the present levels of farm wage rates equal, exceed, or fall short of the farmers' ability to pay wages, comparative statistics are needed on the actual level of net income of the two groups--the employers of hired labor and the hired farm workers.

^{10/} On the other hand, if all-farm averages of net farm income in dollars per unit of time were substituted for index numbers, and the relationship with farm wage rates or wage income were gauged from such values, erroneous conclusions could easily be drawn because of the great differences in average income level between all farms and those farms which hire an appreciable amount of labor.

The nearest approximations available for a comprehensive coverage of farms are those developed from the special tabulations of material from the 1940 Census for farms classified by total value of production and from supplementary data. 11/ Although these estimates do not permit a separate classification of hiring farms, their indication of the increasing importance of farms as hirers of wage labor as we go up the scale in value of production permits some inferences as to the income relations of the two groups.

Table 31 shows a distribution of the gross value of agricultural production during 1939 among hired labor, other production expenses, and the net returns per farm (to family labor for management and for use of invested capital) for groups of farms classified by total value of products sold, traded, or consumed at home. 12/ In addition, it shows the average man-years of labor hired on farms of the different size-of-enterprise classes and the estimated wage costs per man-year of hired labor.

Only on farms with total value of production of less than \$400 was the net income from farming per farm family less than the estimated annual wages earned by a farm laborer who had 12 months of work on such farms. However, on farms with this size of enterprise, only about one-tenth of a man-year of hired labor was utilized on the average during a year, and the average amount of wages paid to hired labor per farm was only \$15. Not until the average total value of production exceeded \$1,250 did average wages paid per year amount to as much as \$100 per farm; not until it exceeded \$2,250 did they amount to \$200; and not until it exceeded \$3,000 did they amount to \$300. Only for farms with total value of production of \$4,000 or more, did the average wage costs including value of perquisites absorb more than 10 percent of the total value of products sold, traded, or consumed at home.

On such hiring farms as shown in table 26 of Chapter 4, wage expenditures and perquisites during the year required 15.7 percent of the total value of products and paid for an average of 2.7 man-years of hired labor at a cost of \$521 per man-year. The total wage bill on these farms averaged \$1,404 compared with an average net return to family labor, capital, and management of \$3,248. When an additional allowance is deducted for a net return on fixed capital investment and on investments in livestock and machinery, the net returns to family labor and management per farm on these farms with \$4,000 or more total value of production in 1939 was \$2,305 per farm. When related to the annual average number of family members working on these farms, the net annual returns to labor and management per farm family worker is estimated at \$1,663 and at \$2,193 on a "man-equivalent" labor input basis. 13/ The latter figure may be compared with the annual average wage income of \$521 for a laborer working 12 months on farms with total value of products of \$4,000 or more in 1939.

11/ Differentials in Productivity and in Farm Income of Agricultural Workers by Size of Enterprise and by Regions, Bur. Agr. Econ., August 1944. Tables 31 and 32 which follow are derived from estimates presented in this report.

12/ Excluding Government payments.

13/ The "man-equivalent" is defined as the worker who in work capacity and labor-time input equals that of the average farm operator who is under 65 and does not work off the farm in excess of 100 days of the year.

Table 31.-Wages to hired labor, other production expenses, and net returns to family labor, capital and management, by value groups of farms, United States, 1939 1/

Value group	:Total value of		:Wages to hired		:All other pro-		:Net returns to fam-		:Wage	
	: products 2/		: labor		:duction expenses		:ily labor, capital, :costs		:per man:Hired	
	:Percent-		:Percent-		:Percent-		:and management		:year of:labor	
	: Amount : age of	: Amount : age of	: Amount : age of	: Amount : age of	: Amount : age of	: Amount : age of	: Amount : age of	: Amount : age of	: hired :per	: hired :per
	:per farm:total	:per farm:total	:per farm:total	:per farm:total	:per farm:total	:per farm:total	:per farm:total	:per farm:total	:labor :farm	:labor :farm
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Man-
										Years
All classified farms	1,309	100.0	138	10.5	653	49.9	518	39.6	349	0.40
\$1 - 99	57	---	11	---	128	---	82	---	176	.06
100 - 249	173	100.0	13	7.5	138	79.8	22	12.7	153	.09
250 - 399	320	100.0	18	5.6	167	52.2	135	42.2	152	.12
400 - 599	491	100.0	27	5.5	225	45.8	239	48.7	166	.16
600 - 749	669	100.0	35	5.2	293	43.8	341	51.0	164	.21
750 - 999	865	100.0	52	6.0	399	46.1	414	47.9	185	.28
1,000 - 1,499	1,222	100.0	88	7.2	597	48.9	537	43.9	240	.37
1,500 - 1,999	1,726	100.0	141	8.2	878	50.9	707	40.9	292	.49
2,000 - 2,499	2,229	100.0	197	8.8	1,152	51.7	880	39.5	325	.60
2,500 - 3,999	3,111	100.0	304	9.8	1,599	51.4	1,208	38.8	367	.83
4,000 - 5,999	4,806	100.0	590	12.3	2,537	52.8	1,679	34.9	424	1.39
6,000 - 9,999	7,498	100.0	1,048	14.0	3,848	51.3	2,602	34.7	478	2.19
10,000 and over	22,989	100.0	4,258	18.5	10,041	43.7	8,690	37.8	595	7.16

1/ Estimated from Bur. Census and Bur. Agr. Econ. data.

2/ Value of farm products sold, traded, or used by farm households. Government payments are not included.

Thus hired labor on these farms was remunerated at a rate approximately one-fourth (23.8 percent) as great as that for labor performed by the operator and members of his family. A week or month of family labor, including the managerial functions of the operator, resulted in a labor return 4.2 times as great as the amount paid for a week or month of work of the hired worker.

If the labor of the operator and the "man-equivalent" labor of his family members is evaluated at the same rate of pay as his hired workers, the profit the farmer realized is estimated to have averaged in 1939 approximately \$2,000 per farm for farms with a total value of production per farm of \$4,000 or more. This amount was cleared on the average over and above all production costs, including an allowance on invested capital and an allowance for all labor performed by the operator and his family on the farm. It is obvious that on such farms in 1939, farm wage rates were not anywhere near a level approaching the maximum ability of the farmers to pay wages.

Most family-size commercial farms in 1939 had a total value of agricultural products of less than \$4,000. The lower down on the value-of-production scale, the less frequent is the practice of hiring labor, the smaller the average amount hired during a year, and the smaller the fraction that wage costs comprise of the total value of production. Application in the lower income groups of an ability-to-pay measure similar to that used for the farms in the category of \$4,000 and over becomes less meaningful in the progressively lower value-of-production classes of farms. If very little hired labor is used, even high wage rates can have little effect on the net income of the farmer.

A comparison of the net returns to family labor and management on farms in the different value groups with the hypothetical annual earnings of a laborer who worked 12 months at the average wages prevailing on these farms is shown in table 32.14. This comparison might also be considered as a comparison of the rates of return per unit of time input of operator or family labor with the wage paid for an equal time unit. In each of the value classes of farms from \$4,000 down to \$600, the ratio of net returns for family labor and management to wages paid per unit of time exceeded one, but by a progressively smaller margin. In other words, even farms with as low a gross income as \$600 to \$750 averaged a net return for family labor per week, month, or year which exceeded the wage earnings of hired farm laborers for a comparable period of work on such farms. The fact that hired farm laborers in 1939 were paid an average rate about equal to that for family workers on all farms, although much lower than that for family workers on farms that hired them, illustrates the inappropriateness of all-farm averages in ability-to-pay considerations.

There are differences among geographic divisions in the magnitude of the ratio of average rate of net returns for family labor to that for hired labor. However, in 1939 all geographic divisions showed the ratio to have been

14/ The comparison is more valid when the returns to family labor are expressed on a per "man-equivalent" basis which approximately equates the labor-time input of the family worker with that of the hired worker.

Table 32.-Ratio of annual net returns to family labor and management per worker to wage cost per man-year of hired labor, by value groups of farms, United States, 1939 1/

Value group	Net returns to family labor and management		Wage cost per		Ratio of (2) to (3)
	Per family worker:		man-year of		
	(1)	(2)	(3)	(4)	
	Dollars	Dollars	Dollars	Rates	
All classified farms	279	370	349	1.06	
\$1 - 99	-143	-198	176	---	
100 - 249	-19	-26	153	---	
250 - 399	72	96	152	.63	
400 - 599	135	178	166	1.08	
600 - 749	187	247	164	1.51	
750 - 999	221	291	185	1.58	
1,000 - 1,499	270	354	240	1.47	
1,500 - 1,999	344	451	292	1.54	
2,000 - 2,499	430	560	325	1.72	
2,500 - 3,999	594	772	367	2.09	
4,000 - 5,999	795	1,053	424	2.49	
6,000 - 9,999	1,309	1,722	478	3.60	
10,000 and over	5,342	6,982	595	11.74	

1/ Estimated from Census and Bur. Agr. Econ. data.

2/ Defined as the worker who in work capacity and labor-time input equals that of the average farm operator who is under 65 and does not work off the farm in excess of 100 days of the year.

3/ The wage cost shown would result only if a full year of hired labor were used and paid for at the rates paid for the hired labor actually used. See table 31 for estimates of man-years of labor hired on the various value groups of farms.

progressively greater than one for farms in the value-of-products classes beginning with those where the hiring of labor becomes of some importance. In the South, where comparatively more labor is hired in the middle and lower value-of-products classes of farms than in other areas, a ratio greater than one is found in all value classes above \$250. 15/

Ability to Pay on Selected Types of Family-
Operated Commercial Farms 16/

In planning farm operations, a prime consideration of the operators of many family farms is to organize the size and intensity of the farm business in such a way that family workers will have relatively full employment through the year. But because of the seasonal nature of farming, such a farm organization may involve labor requirements which cannot be fully met by the operator and his family at certain peak seasons. Operators of these farms can afford to pay seasonal hired workers wages that exceed the annual average returns to all labor per hour or day. By so doing, they can maximize the yearly labor returns of the family labor force.

Thus with respect to this ability-to-pay factor, one would expect operators of medium and smaller-size farms often to find it advantageous to pay higher wage rates to seasonal hired workers than the average returns for the labor time of the family. 17/ Such considerations would not apply equally to operators of larger farms which require hired men in addition to the family labor throughout most of the year.

On the other hand, from a production standpoint, larger farms are usually more efficient in the use of labor because they are more completely mechanized and because of certain efficiencies associated with a larger scale of business. Workers would therefore be more productive and operators of larger farms could afford to pay higher wage rates than operators of smaller farms. 18/ It is

15/ For geographic divisions estimates of net income from farming for farms classified by total value of products in 1939, see Differentials in Productivity and in Farm Income of Agricultural Workers by Size of Enterprise and by Regions, Bur. Agr. Econ., August 1944.

16/ This section of the Chapter was contributed by Glen T. Barton. The estimates of farm income and expense utilized in this analysis were developed by Wylie D. Goodsell.

17/ Frequently too, the prevailing wage rates for seasonal jobs are higher than general farm wage rates at the same or other times of the year. Factors accounting for this situation include the greater demand for labor in peak seasons, the more difficult type of work, or work that must proceed at a faster pace.

18/ Such wage differentials seem to be reflected in the estimates of wage costs per man-year of hired labor shown in table 31 which, after the two lowest class intervals, show a regular upward progression on farms with higher value of production.

possible, however, that rates paid to some casual or seasonal labor on larger farms; particularly piece rates, may be equal to or even lower than rates on smaller farms for reasons not connected with ability to pay. 19/

One approximation to the amount of wages farmers are able to pay in particular areas and types of farms is the value of the output attributable to hired labor. Such an approximation assumes that the farmer is able to pay what the laborer's time is worth to him. A determination of the value of the output which can be attributed to hired labor is a difficult problem since it often involves dissociating the actually inseparable contributions to production of land, labor, capital, and management.

However, if the assumption is made that all labor, family and hired, contributes to the net returns secured from agricultural production in proportion to time input, then one measure of the ability to pay wages is provided by the "returns to labor" per hour or day of work--the net value of production left after all costs other than labor are deducted.

The administrative application of such a measure of ability to pay would require data regarding income, costs, and wage rates for the specific types and sizes of farms on which the wages paid are being appraised by such a standard.

In the following section, this method of appraising ability to pay prevailing wage rates by a comparison of these rates with net returns from farming to all labor or to operator and family labor is illustrated for several typical or nodal farms of specified types. The comparison of both wage rates and net returns from farming will be made on an hourly-equivalent basis. The estimated gross and net income of these farms relate to an average family-operated commercial farm in counties where the specified type is preponderant. Because these estimates relate to a farm organization manned primarily by family labor, the hiring of additional help is limited to relatively short periods of work in seasonal operations. 20/ The estimated net returns from farming are therefore compared on an hourly basis with the prevailing wage rates that are more nearly appropriate for seasonal labor. Such rates are at higher levels than the average farm wage rates for all kinds of labor.

In 1942, all types of farms studied showed net returns per hour to all labor greater than the prevailing wage rates per hour (table 33). 21/ Such a situation did not prevail in all years, as is suggested by the figures for the year 1939 when prevailing hourly-equivalent wage rates exceeded returns per hour on 3 of the 11 types of farms. The association of low returns per hour with low wage rates, and vice versa, is also apparent for these types of farms.

Changes from 1910-14 to date, by 5-year periods, in farm wage rates, ability to pay, and related factors for four types of farms are shown in

19/ See pp. 61 and 65.

20/ See page 106 for footnote 20.

21/ In addition to the returns for labor and management, operators were allowed, in the estimates, a return on their capital investment.

Table 33.-Farm wage rates and net returns from farming to all labor, ^{1/} selected types of farms, 1942 and 1939

Area and type of farm	1942		1939	
	:Returns to: Wage		:Returns to:Wage	
	:all labor :rate per:		all labor :rate per	
	:per hour	:hour 2/	:per hour	:hour 2/
	Cents	Cents	Cents	Cents
Winter wheat--wheat	165	37	40	21
Winter wheat--wheat, grain-sorghum	129	30	45	17
Corn Belt--cash-grain	102	32	42	21
Winter wheat--wheat, corn	74	36	^{3/} 05	20
Dairy--New York dairy	48	37	24	23
Dairy--Wisconsin dairy	47	32	22	20
Corn Belt-hog-dairy	45	31	19	21
Corn Belt-hog-beef raising	43	30	14	20
Cotton--Mississippi Delta	40	13	20	10
Cotton--2-mule Georgia	24	12	10	9
Cotton--Black Waxy Texas	26	19	14	13

^{1/} Net farm income after deducting all production expenses except wages to hired farm labor and after allowing a return on capital investment.

^{2/} Based on the rate per day without board.

^{3/} High-risk area; comparatively low yields in 1939.

table 34. Marked differences exist in the relation between wage rates and return per hour to all labor among the four types of farms. Average wage rates exceeded average returns per hour--hence the operator and family members received remuneration for their labor at less than prevailing wage rates--during 4 of the 7 complete 5-year periods on the hog-dairy farm. On the wheat farm, however, average wage rates were less than the average returns per hour in every 5-year period.

When individual years are considered, the differences among the four types of farms in this respect is even more striking. Wage rates were greater than returns per hour for 20 years out of 33 on the hog-dairy farm; 17 out of 34 on the New York dairy farm; 10 out of 34 on the Georgia cotton farm; and only 4 out of 34 on the wheat farm.

20/ The size of farm business and the requirements for hired labor represented by the organization of these typical farms may be noted from the following data for the year 1939:

<u>Area and type of farm</u>	<u>Gross farm income</u>		<u>Net farm income *</u>	<u>Amount of labor</u>	
	<u>Total</u>	<u>Excluding gov't payments and rental value of dwellings</u>		<u>Total</u>	<u>Hired</u>
	<u>Dol.</u>	<u>Dol.</u>	<u>Dol.</u>	<u>Days</u>	<u>Days</u>
<u>Winter wheat:</u>					
Wheat	3,024	2,374	1,817	293	17
Wheat, grain-sorghum	3,116	2,348	1,920	321	17
Wheat, corn	2,773	2,293	1,252	387	33
<u>Corn Belt:</u>					
Cash grain	4,128	3,588	2,402	409	50
Hog dairy	2,489	2,167	1,192	512	121
Hog beef-raising	1,926	1,665	1,025	390	35
<u>Dairy:</u>					
New York	3,021	2,821	1,317	500	89
Wisconsin	2,569	2,294	1,473	608	172
<u>Cotton:</u>					
Mississippi delta	1,202	976	662	335	45
Georgia-2-mule	814	656	562	389	70
Texas Black Wax	1,340	1,044	858	350	34

* Net farm income as used here includes the value of farm products consumed at home, rental value of dwelling, and the amount of money received during the calendar year by operator and unpaid members of his family (including Government payments) for services rendered on the farm and the farmer's own investment.

Table 34.-Farm wage rates and net returns from farming to all labor and to operator and family labor, specified types of farms, selected periods, 1910-43

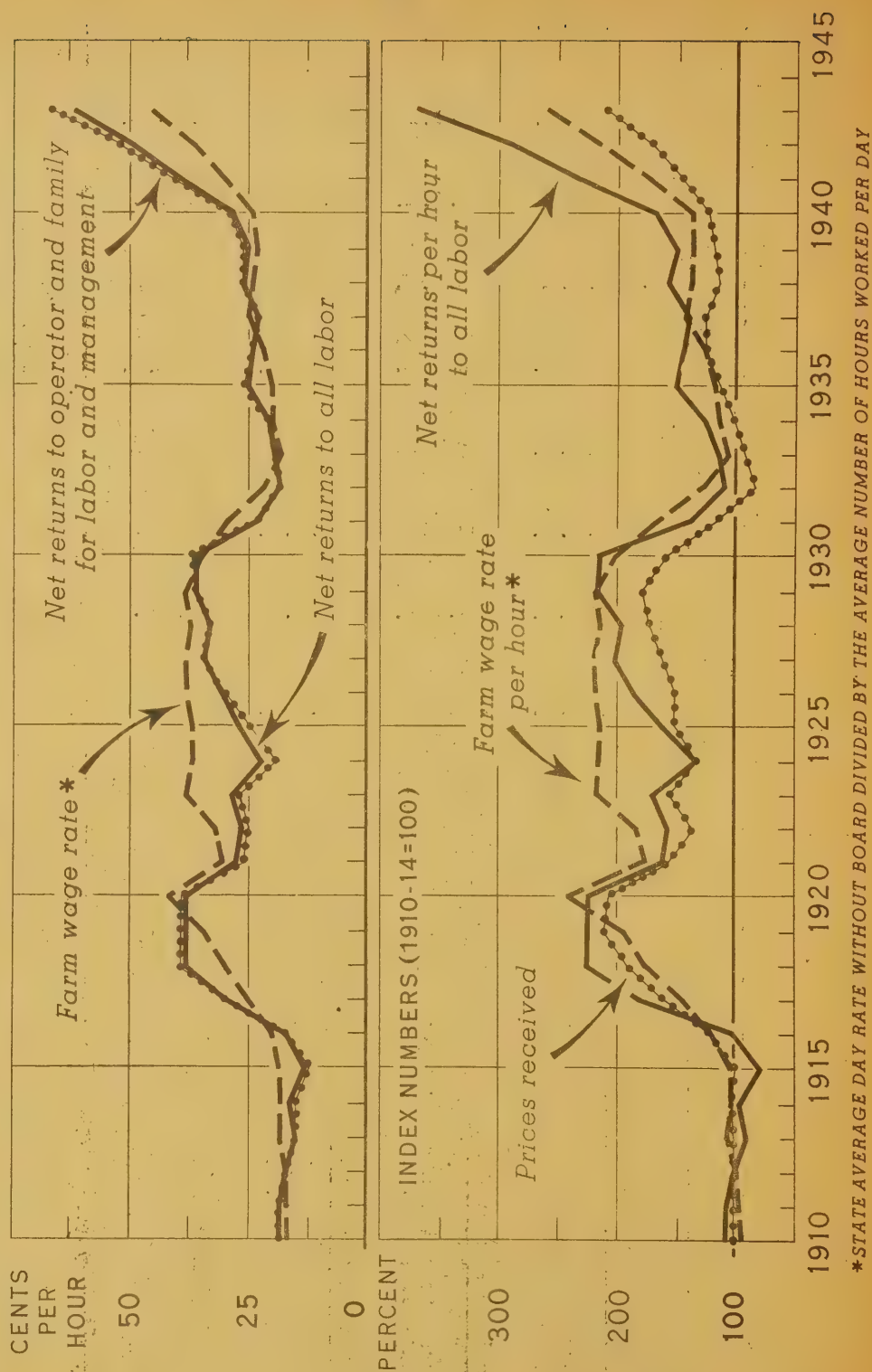
Type of farm and area	:1910-:1915-:1920-:1925-:1930-:1935-:1937-:									
	: 14 :	: 19 :	: 24 :	: 29 :	: 34 :	: 39 :	: 41 :	: 1942 :	: 1943 :	: 1944 :
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Wheat farm - Winter Wheat Area										
Wage rate per hour, without board	0.18	0.29	0.34	0.31	0.19	0.18	0.21	0.37	0.46	
Returns to all labor per hour	.25	.57	.48	.69	.24	.53	.55	1.65	1.91	
Returns to operator and family labor per hour <u>2/</u>	.25	.55	.51	.81	.24	.55	.61	1.75	1.98	
Cotton Farm - Georgia										
Wage rate per hour, without board	.09	.13	.14	.13	.08	.09	.09	.12	.16	
Returns to all labor per hour	.10	.22	.12	.17	.08	.10	.11	.24	.27	
Returns to operator and family labor per hour <u>2/</u>	.10	.23	.12	.17	.08	.10	.11	.25	.28	
Hog-Dairy Farm - Corn Belt										
Wage rate per hour, without board	.17	.26	.30	.29	.17	.19	.22	.31	<u>3/</u>	
Returns to all labor per hour	.15	.25	.20	.30	.11	.23	.22	.45	<u>3/</u>	
Returns to operator and family labor per hour <u>2/</u>	.15	.25	.18	.30	.09	.23	.22	.51	<u>3/</u>	
Dairy Farm - New York										
Wage rate per hour, without board	.17	.25	.36	.38	.25	.23	.25	.37	.45	
Returns to all labor per hour	.17	.27	.28	.32	.23	.25	.28	.49	.62	
Returns to operator and family labor per hour <u>2/</u>	.17	.27	.27	.32	.24	.25	.29	.52	.66	

1/ Preliminary.

2/ All nonlabor costs plus wages paid to hired labor were subtracted from total farm income and the resulting net figure was divided by the total hours worked by the operator and unpaid family workers to obtain this figure.

3/ Data not available.

ESTIMATED RETURNS PER HOUR OF MAN-LABOR ON TYPICAL COMMERCIAL FAMILY-OPERATED NEW YORK DAIRY FARMS, AND RELATED FACTORS, 1910-43



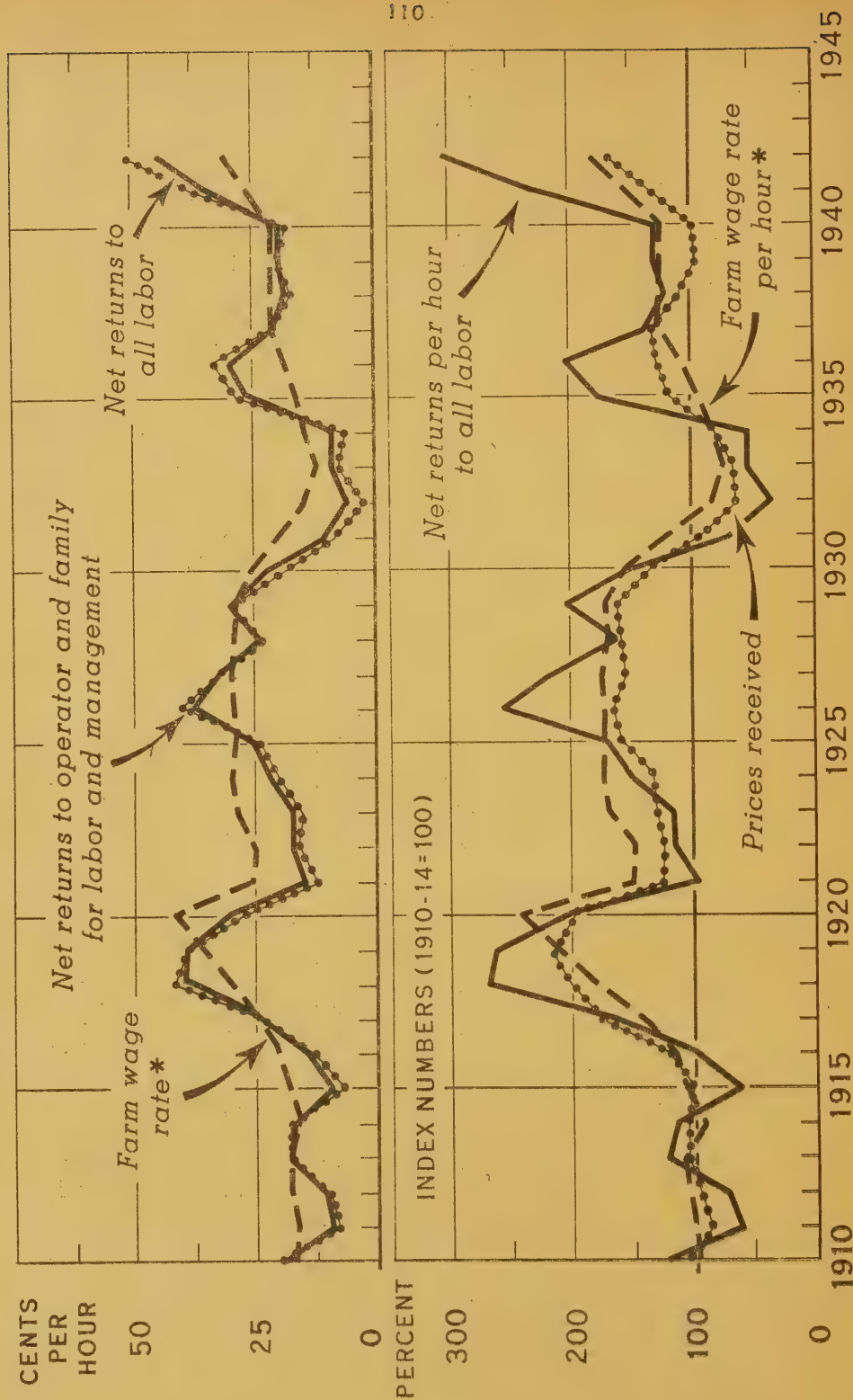
On all of the types of farms, wage rates in 1942 and in 1943 were much lower than returns to labor per hour. In the case of typical wheat farms in the winter-wheat area, returns per hour to all labor were \$1.65 and \$1.91 in 1942 and 1943, respectively. The prevailing wage rates in the winter-wheat area on an hourly-equivalent basis were only 37 cents and 46 cents in 1942 and 1943. On the New York dairy farm the estimated net returns for all labor were 49 cents and 62 cents in 1942 and 1943, compared with wage rates of 37 cents and 45 cents. On the cotton farm in Georgia, returns to all labor per hour in these 2 years were 24 cents and 27 cents compared with hourly-equivalent wage rates of 12 cents and 16 cents.

The changing relationships among wage rates, returns per hour to labor, and related factors during 1910-42 can be seen more clearly for two of the type-of-farm situations in figures 13 and 14. The New York dairy farm and the Corn Belt hog-dairy farm were chosen for illustrative purposes primarily because hired labor is relatively more important in their operation than it is in the case of a wheat farm and a Georgia cotton farm. The upper section of each chart shows a comparison of prevailing farm wage rates and returns per hour to the farm operator and family workers for their labor and management, as well as the returns to all labor. On the New York dairy farm, the returns per hour to the farm operator and family workers have been above the wage rates paid to hired hands since 1935. On the hog-dairy farm, on the other hand, returns per hour to farm operator and family workers were above wage rates in 1935 and 1936, below them for 1937 through 1940, and again above in 1941 and 1942.

The lower section pictures the movements in the index of wage rates, returns per hour to all labor, and prices received. As might be expected, the index of returns per hour to labor fluctuates much more than do the indexes of wage rates and prices received; this is particularly so on the hog-dairy farm. On both types of farms the level of wage rates is more stable than the level of prices. However, the tendency for wage rates to lag behind changes in both returns and prices is evident for most of the period. Although prices have lagged behind wage rates in the present war period, returns have risen more rapidly than either, as a result of favorable yields and increased production.

During the present war period, prices received by farmers have risen considerably but net farm income has risen even more, because of extremely favorable yields and the fact that expenses of production increased much less than the increases in prices and gross income. In other words, farm wage rates, at least for the type-of-farm situations under consideration, can rise at a faster rate than farm prices and still be well within the limit of farmers' ability to pay during a period like the present.

ESTIMATED RETURNS PER HOUR OF MAN-LABOR ON TYPICAL COMMERCIAL FAMILY-OPERATED CORN BELT HOG-DAIRY FARMS, AND RELATED FACTORS, 1910-42



*AVERAGE DAY RATE WITHOUT BOARD FOR CORN BELT STATES DIVIDED BY THE AVERAGE NUMBER OF HOURS WORKED PER DAY

FIGURE 14

Chapter 6

WAGES RATES IN AGRICULTURE AND INDUSTRY

Entirely aside from the question of whether or not farm wages are in balance with farmers' income as judged by past relationships, a very practical problem now faced by farmers is that of obtaining labor at wages that are satisfactory to the workers and within the farmers' ability to pay. In doing this farmers must compete with nonagricultural employers as well as among themselves. The relationship of farm wage rates to nonagricultural wage rates is thus an important factor in determining the prevailing level of farm wage rates. Moreover, problems of stabilization of nonagricultural rates tie in at certain points with changes in level of certain agricultural rates. What the relationship between agricultural and nonagricultural wage rates is and how it has changed are considered in this chapter.

In examining this relationship, there are no precise criteria by which to judge what the differentials should be between farm wage rates and wage rates in industry.

Some of the factors offsetting lower wage rates in agriculture than in industry might be the receipt by farm laborers of nonmoney remuneration (housing, room and board, garden facilities, other perquisites) in addition to cash wages, and a lower cost of living in rural areas. However, many farm workers receive little besides their cash wages, and others live in urban areas, paying the same prices as industrial workers. Industrial workers, in turn, usually obtain or have access to more and better public services and facilities (hospitals, schools, libraries and other educational facilities, recreation facilities, transportation, etc.). Beyond these are a number of intangible values of the rural or urban environment for which individuals may have preference.

Even if these several factors which need to be considered when qualifying a comparison of agricultural and nonagricultural wage rates should favor the agricultural workers, that would, at most, warrant only a small differential in wage rates for work that calls for comparable effort and skill. The presence of wage differentials much beyond any reasonable allowance for the noncomparable elements must be due to other factors, such as the labor supply-demand ratio, the residual character of the agricultural labor market, the weak bargaining position of farm wage workers, and their relative immobility. The conditions of full employment that exist now have done much to lessen these disadvantages. The wage differentials between agricultural and industrial workers characteristic of pre-war years and pre-war unemployment have therefore narrowed to varying degrees in different areas or with respect to different industries.

Farm Wage Rates and Hourly Earnings of Factory Workers

Hourly earnings of workers in manufacturing industries averaged \$1.01 in the middle of April 1944 as compared with the farm wage per day (without board) of \$3.58 on April 1, 1944 and \$3.50 on January 1, 1944. At these rates, hired farm workers averaged approximately 37 cents an hour in April 1944, but about 40 cents an hour in January, when the workday is somewhat shorter. Equivalent hourly earnings of farm workers paid by the month without board in April 1944 were approximately 32 cents an hour. The rate per day without board probably is the most appropriate of the several agricultural-wage series for comparisons with hourly earnings of nonagricultural workers, since it is the most common mode of payment for the industry as a whole, and in addition, it partially reflects hourly earnings of piece workers and of workers actually paid by the hour. 1/

The course of change in agricultural wage rates was roughly similar to that for industrial wage rates from 1910 to 1920, but departed greatly from it in years after 1920 (fig. 15). Despite the depressions of the early 1920's and 1930's, hourly earnings of factory workers have shown a clear-cut upward trend, with each year since 1936 setting a new high record. 2/ In contrast, hourly earnings of farm laborers computed on the basis of day-without-board wage rates had a much steeper drop in 1921 and 1922; they improved only slightly in the generally prosperous period following, fell further than industrial wage rates during the depression, and recovered at a much slower rate. Although the rate of increase of daily farm wage rates has been very rapid since 1940, by 1943 the equivalent hourly earnings were still below those in 1920, 3/ whereas average hourly earnings for factory workers in 1943 were 66 percent higher than they were in 1920.

When hourly earnings are adjusted for changes in prices of goods used in family living, the steady upward trend in real wages of factory workers and the absence of such a trend in real wages of farm laborers becomes more apparent (fig. 15). In very few of the years since 1913 did real hourly earnings for factory workers fail to show a steady increase, which amounted to 107 percent over the 1913 level by 1939 and to 149 percent by 1943.

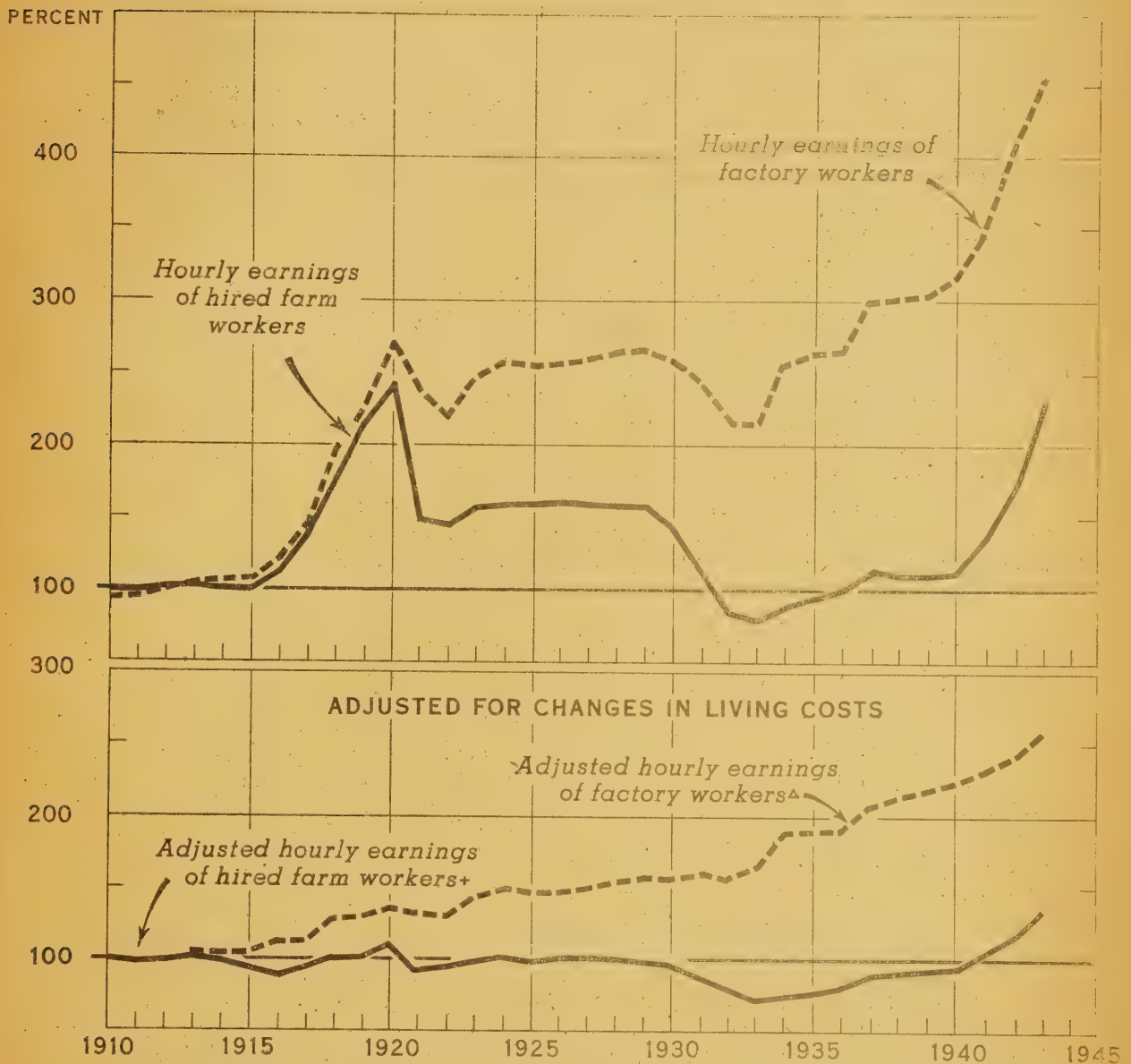
1/ Although the day rates without board provide as satisfactory a basis as is available for comparisons of trends and generally prevailing levels of daily and hourly earnings in agriculture with hourly earnings in other industries, it should be recognized that for certain groups of farm workers, particularly workers in some truck and fruit crops who are paid primarily on a piece-rate basis, the day rates may not fully reflect equivalent earnings per day.

2/ Hourly earnings of factory workers are derived from weekly earnings and hours worked during the week. Hence compensation for overtime at premium rates of pay is included in the average hourly earnings.

3/ The index of all farm wage rates (per day and per month) increased somewhat more rapidly after 1940 and in 1943 exceeded the 1920 level.

HOURLY EARNINGS OF HIRED FARM WORKERS* AND OF FACTORY WORKERS,** UNITED STATES, 1910-43

INDEX NUMBERS (1910-14=100)



* BASED ON AVERAGE FARM WAGE RATE PER DAY WITHOUT BOARD.

** BUREAU OF LABOR STATISTICS AND BUREAU OF AGRICULTURAL ECONOMICS; 1943 DATA ARE PRELIMINARY.

+ ADJUSTED FOR CHANGES IN LIVING COSTS BY INDEX OF PRICES FARMERS PAY FOR GOODS USED IN FAMILY LIVING (1910-14 DOLLARS).

△ ADJUSTED FOR CHANGES IN LIVING COSTS BY BUREAU OF LABOR STATISTICS INDEX OF COST OF LIVING (1913 DOLLARS).

FIGURE 15

Except for the single year 1920, however, real hourly earnings of farm workers in no single year before 1941 exceeded the 1913 figure by more than 2 percent, and in all years of the 1930's they fell far below.

Comparison of the relative changes in agricultural and industrial wage rates during corresponding years of the World War I and World War II periods show that farm wage rates have advanced at a more rapid rate in World War II than in World War I. Hourly earnings of workers in manufacturing industries, on the other hand, have increased at a slower rate than in World War I. In 1943, the fifth year of this war, farm wage rates per day without board (and their equivalent hourly earnings) averaged 110 percent greater than in the first year of this war (1939) as compared with an increase of 78 percent from 1914 to 1918. Hourly earnings in manufacturing industries, however, increased by only 49 percent from 1939 to 1943 as compared with an 83 percent rise from 1914 to 1918. 4/

Differences between the two wars in their effects on the agricultural economy must be taken into account in interpreting these comparisons. Even more important is a recognition of the depressed level of farm wage rates prevailing in 1939, both in absolute amount and relative to industrial rates. Thus while hourly earnings of workers in manufacturing industries in 1939 were nearly 3 times as great as in 1914, farm wage rates per day without board were only 10 percent greater in 1939 than in 1914. (The composite farm wage rate index was 22 percent higher.)

In 1943, the annual average hourly earnings of farm laborers were approximately 33 cents (computed from the day without board wage rates), or only 34 percent of the average hourly earnings of 96 cents for factory workers (table 35). Although this ratio of farm to nonfarm wage rates is higher than for any year since 1930, it is substantially lower than for any period before 1930 for which data are available. The comparable percentage was 41 percent in the 1925-29 period, 62 percent in the 1914-20 period, and 67 percent in the 1910-14 period. Thus, if farm wage rates bore the same relationship to hourly earnings of workers in manufacturing industries during the year 1943 as they did during the World War I period, they would have had to average about 80 to 85 percent higher than they actually did in 1943.

Farm Wage Rates and Wages for Common Labor

Farmers do not generally have to compete with all grades of wages in manufacturing industries. Although wartime demands for labor and the progress in simplification of industrial jobs have widened the range of industries and occupations with which farmers do have to compete, the industries that have always been important competitors (and still are) consist largely of a group

4/ Because of the importance of overtime rates of pay in the present war period, the percentage increase in basic wage rates for factory workers is smaller than is indicated by the change in hourly earnings.

Table 35.-Average hourly earnings of farm laborers, workers in manufacturing industries, common labor in industry, and common labor in road building, selected periods, United States, 1910-1944

Years	Average hourly earnings				Hourly earnings of farm workers as			
	Workers in		Common labor		: percent of hourly earnings of:		Percent	
	:manufacturing:labor in		:in road		:manufacturing:labor in			
	Cents	Cents	Cents	Cents	: industry: building	: industry: building		
1944 (April)	36.9	101.2	---	---	68.0	36	54	
1943	32.7	96.1	---	---	71.0	34	46	
1942	24.9	85.3	63.5	---	58.0	29	43	
1941	19.3	72.9	56.6	---	48.0	26	40	
1940	15.9	67.0	50.7	---	46.0	24	35	
1939	15.6	64.4	50.0	---	42.0	24	37	
1935-39	15.0	60.8	47.0	---	40.4	25	37	
1930-34	14.5	50.5	38.8	---	37.6	29	39	
1925-29	22.8	55.4	5/34.2	---	38.8	41	59	
1920-24	24.4	52.3	---	---	---	47	---	
1920	34.6	57.8	---	---	---	60	---	
1919	30.3	47.7	---	---	---	64	---	
1918	25.4	40.8	---	---	---	62	---	
1917	19.8	31.1	---	---	---	64	---	
1916	15.8	26.1	---	---	---	61	---	
1915	14.4	22.9	---	---	---	63	---	
1910-14	14.2	21.2	---	---	---	67	---	

1/ Based on rates per day without board using a 10-hour work-day as an annual average.

2/ Bur. Labor Stat. and the Bur. Agr. Econ.

3/ Bur. Labor Stat.

4/ Fed. Works Agency, Pub. Roads Adm.

5/ 1926-29 average.

which employs a high proportion of unskilled and semi-skilled workers.

A considerable amount of alternate or supplementary employment for farm workers is provided by common-labor work in construction, transportation, and other public utilities and in various departments within the manufacturing industries. The sources of labor supply customarily used by farmers are shared particularly by the group of industries which process or handle agricultural products. A special survey made in January 1944 showed that of the persons employed at nonagricultural work in that month approximately $2\frac{1}{4}$ million had worked on farms for some time during 1943. ^{5/} Nearly 70 percent of these $2\frac{1}{4}$ million workers were at work in the following groups of industries: (1) manufacturing (37 percent), (2) construction (8 percent), (3) transportation, communication and utilities (7 percent), and (4) retail and wholesale trade (17 percent). These figures included approximately one-quarter of a million workers who had worked on farms in 1943 but were employed in food, clothing, textiles, and leather manufacturing industries in January 1944.

When comparisons are made for laboring groups more comparable in skill with farm laborers than all workers in manufacturing industries, the same general relations hold. Hourly earnings of farm laborers comprise a somewhat higher percentage of earnings of common labor than of all factory workers. In 1943, for example, hourly earnings for farm laborers were 46 percent of earnings for common labor in road building (table 35). Just as in the case of the comparison with all factory workers, this percentage represents an increase over that in the depression years of the 1930's, but is lower than the corresponding percentage for pre-depression years.

Although there have been marked advances in both farm and nonfarm wage rates in every area since war began, there have been considerable regional differences in the degree to which relative increases in farm wage rates equalled or exceeded increases in nonfarm wage rates. In 7 of the 9 major geographic divisions, hourly earnings of farm workers showed a greater percentage increase from 1939 to 1943 than did hourly wage rates of common labor in road building. For the country as a whole hourly earnings of farm workers increased 110 percent compared with 69 percent for common labor in road building (table 36).

In the New England States and the South Atlantic, road building rates increased more rapidly from 1939 to 1943 than did farm wage rates per day without board. In both of these divisions the increase in daily farm wage rates was much lower than the United States average, while the increase in wages to common labor in road building was above the United States average.

The improvement in farm wage rates in all of the major geographic divisions during the last 4 years appears great because farm wages were at a depressed level in 1939. If the farm-nonfarm comparisons are made with

^{5/} The Farm Working Force of 1943, Bur. Agr. Econ., March 1944.

Table 36.-Changes in average hourly earnings of hired farm workers and of common labor in road building, United States and geographic divisions, 1929-43 and 1939-43

Area	Percent Increase											
	Hourly earnings of farm workers 1/			Hourly earnings of common labor in road building 2/			Hourly earnings of common labor in road building			Hourly earnings of common labor in road building		
	1929			1943			1929			1943		
	Cents			Cents			Cents			Cents		
	Pct.			Pct.			Pct.			Pct.		
United States	32.7	15.6	22.5	71	42	39	109.6	45.3	69.0	82.0		
New England	45.6	26.8	35.8	89	48	51	70.1	27.4	85.4	74.5		
Middle Atlantic	42.6	22.9	35.2	93	52	43	86.0	21.0	78.8	116.3		
East North Central	40.4	20.9	29.9	93	60	40	93.3	35.1	55.0	132.5		
West North Central	45.6	19.8	29.9	78	45	38	130.3	52.5	73.3	105.3		
South Atlantic	22.0	11.8	17.3	58	29	27	86.4	27.2	100.0	114.8		
East South Central	20.2	10.3	15.4	56	29	26	96.1	31.2	93.1	115.4		
West South Central	27.4	12.2	18.2	54	37	31	124.6	50.5	45.9	74.2		
Mountain	47.7	22.6	31.1	86	56	46	111.1	53.4	53.6	87.0		
Pacific	65.7	27.1	35.3	106	65	53	142.4	86.1	63.1	100.0		

1/ Based on rates per day without board and estimated average length of work-day.

2/ Federal Works Agency, Pub. Roads Adm.

respect to percentage change since 1929, the picture is reversed. For the United States as a whole, 1943 average hourly earnings of farm workers represented only a 45 percent increase over 1929, whereas 1943 hourly wage rates of common labor in road building were 82 percent higher than in 1929. Although there was considerable variation about these percentages, the increase in common-labor rates from 1929 to 1943 was greater than the increase in farm wage rates within every geographic division.

Despite the upward trend since the depression in the ratio of hourly earnings of farm workers to hourly rates of common labor in road building, the ratio for the year 1943 was not so great as that of the 1925-29 period in any geographic division; in most of the divisions the 1943 ratio was substantially under that for 1925-29 (table 37).

The level of farm wage rates thus far in 1944 is substantially higher than the annual average for the year 1943. The United States average farm wage per day without board was \$4.06 in July 1944. Hourly earnings of farm laborers at this rate were 50 percent of the average hourly earnings of common labor in road building (table 38). In the Pacific States the July farm wage rate per day was \$7.39, or the equivalent of 70 percent of the hourly earnings of common labor (\$1.13 per hour)--the highest ratio in any major geographic division. In three divisions--the South Atlantic, East South Central, and East North Central-- the ratios were substantially under the national average of 50 percent. Relatively high common-labor rates in the East North Central States and relatively low farm wage rates in the two Southern divisions account for these differences.

Persons who leave farms for work in urban areas frequently find jobs in construction and manufacturing industries that pay unskilled, common-labor rates. Data by States on hourly entrance rates of common labor in 20 industries ^{6/} are indicative of the competitive wage situation which farmers face. Comparable information for a more recent date than July 1942 are not available. At that time, the farm wage per day without board of \$2.45 was only 52 percent of the average entrance rate of common labor of \$4.68, when converted to an 8-hour day basis (table 39). In the New England States, the percentages were much higher than the United States average. At the other end of the scale, 8 southern States and Missouri had farm wage rates which were only 37 to 44 percent of the entrance rates for common labor in industry. The practice of exclusion of Negroes from most industrial jobs in the South means that the Southern farmers have not felt industrial competition so keenly for a great part of their labor supply. This may have been a factor in the much lower-than-average ratio of farm wage rates to rates for common labor in industry in these Southern States.

^{6/} Including 16 manufacturing industries, 3 groups of public utilities, and building construction.

Table 37.-Average hourly earnings of farm workers 1/ expressed as percentages of the hourly earnings of common labor in road building 2/ United States and geographic divisions, for specified periods, 1925-1943

Area	Annual averages				5-year averages		
	: 1943	: 1942	: 1941	: 1940	: 1935-39	: 1930-34	: 1925-29
	Percentages				Percentages		
United States	46	43	40	35	37	39	59
New England	51	58	57	52	56	60	71
Middle Atlantic	46	53	50	44	46	59	79
East North Central	43	43	40	34	36	45	78
West North Central	58	57	51	43	43	47	79
South Atlantic	38	36	39	41	40	46	67
East South Central	36	37	34	31	35	41	62
West South Central	51	46	39	33	36	41	65
Mountain	55	50	46	41	39	42	69
Pacific	62	51	45	40	43	47	67

1/ Obtained by dividing the farm wage rate per day without board by the average length of work-day.

2/ Fed. Works Agency, Public Roads Adm.

Table 38.-Farm wage rates and common-labor rates in road building, United States and geographic divisions, July 1944

Area	Average hours:			Hourly earnings:		
	: Farm wage: worked per :			: of common :		
	: rate per :	: day by :	: day :	: of farm labor- :	: road :	: building :
	: without :	: laborers :	: the day :	: ers hired by :	: building :	: labor in road :
	: board :	: 1/ :	: 2/ :	: 2/ :	: 2/ :	: building :
	Dollars	Hours	Cents	Cents	Cents	Percent
United States	4.06	10.6	38.3	77	49.7	
New England	5.13	10.0	51.3	91	56.4	
Middle Atlantic	4.71	10.9	43.2	91	47.5	
East North Central	4.67	11.4	41.0	97	42.3	
West North Central	5.19	11.6	44.7	81	55.2	
South Atlantic	2.64	10.5	25.1	69	36.4	
East South Central	2.41	10.6	22.7	62	36.6	
West South Central	3.39	10.3	32.9	61	53.9	
Mountain	5.63	10.1	55.7	97	57.4	
Pacific	7.39	9.3	79.5	113	70.4	

1/ Reported by farmers for June 1, 1944, Farm Labor, Bur. Agr. Econ., June 14, 1944

2/ Fed. Works Agency. Public Roads Adm.

Table 39.-wage rates of farm workers and of common laborers in industry, by States, July 1942

States	Entrance rates				Entrance rates				Percent farm			
	: Farm		: of		: Farm		: of		: wage		: wage rate per	
	: without		: common labor		: without		: common labor		: day is of		: day is of	
	: board		: Hourly		: board		: Hourly		: Per 8-		: Per 8-	
	: per day		: 1/		: per day		: 1/		: hour day		: labor rate	
	Dollars	Dollars	Dollars	Percent	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Percent
U. S.	2.45	.585	4.68	52								
Me.	3.65	.540	4.32	84	W. Va.	2.10	.605	4.84	43			
N.H.	3.90	.575	4.60	85	N. C.	1.70	.359	2.87	59			
Vt.	3.75	.451	3.61	104	S. C.	1.15	.355	2.84	40			
Mass.	3.70	.673	5.38	69	Ga.	1.25	.365	2.92	43			
R. I.	3.80	.683	5.46	70	Fla.	1.75	.385	3.08	57			
Conn.	3.90	.620	4.96	79								
N. Y.	3.65	.704	5.63	65	Ky.	1.75	.585	4.68	37			
N. J.	3.60	.691	5.53	65	Tenn.	1.45	.433	3.46	42			
Pa.	3.20	.722	5.78	55	Ala.	1.35	.429	3.43	39			
Ohio	3.10	.741	5.93	52	Miss.	1.30	.372	2.98	44			
Ind.	3.00	.722	5.78	52	Ark.	1.60	.390	3.12	51			
Ill.	3.25	.810	6.48	50	La.	1.35	.434	3.47	39			
Mich.	3.35	.723	5.78	58	Okla.	2.55	.520	4.16	61			
Wisc.	3.30	.730	5.84	57	Tex.	2.05	.429	3.43	60			
Minn.	3.50	.701	5.61	62	Mont.	4.10	.759	6.07	68			
Iowa	3.70	.659	5.27	70	Idaho	4.10	.721	5.77	71			
Mo.	2.30	.764	6.11	38	Wyo.	3.70	.645	5.16	72			
N. Dak.	3.40	3/	---	---	Colo.	3.40	.729	5.83	58			
S. Dak.	3.25	.633	5.06	64	New Mexico	2.40	.492	3.94	61			
Nebr.	3.40	.658	5.26	65	Ariz.	3.00	3/	---	---			
Kan.	3.75	.588	4.70	80	Utah	3.65	.617	4.94	74			
Del.	2.95	.514	4.11	72	Nev.	3.50	.621	4.97	70			
Md.	2.90	.618	4.94	59	Wash.	4.85	.859	6.87	71			
Va.	2.10	.438	3.50	60	Oreg.	4.25	.877	7.02	61			
					Calif.	4.50	.811	6.49	69			

1/ Bur. Labor Stat. rates for adult male common laborers in 20 industries representing manufacturing, public utilities and building construction.

2/ Since the length of workday for hired farm workers in July is longer than 8 hours this comparison overstates somewhat the relative level of the farm wage rate.

3/ Not available.

Farm Wage Rates and Wages of Workers in Industries That
Process Farm Products

Because the location of various types of industries that process farm products (or prepare them for market) is often near the source of supply, these industries tend to compete with agriculture for the local supply of labor. The degree of competition is accentuated when there is coincidence in the demand for labor for field and plant work and when the types of labor used are somewhat interchangeable. The competitive labor situation is more common in the case of perishable crops which require rapid harvesting and processing, such as fruits and vegetables, sugarcane and sugar beets. Cotton ginning and crushing of oil-bearing seeds present a somewhat similar situation.

There are, however, many types of processing operations of agricultural products in the manufacture of foods, textiles, etc., which are rather evenly distributed throughout the year. Flour milling, slaughtering and meat packing, and dairy products manufacturers are examples of industries which provide alternative employment opportunities in rural areas, although they do not present the same labor competitive situation that is found in highly seasonal processing industries.

Comparisons of agricultural wage rates with wages paid in processing establishments should be made for the respective rates in localities where the two actually compete for labor, but little data of this kind are available. The United States average farm wage rate, is heavily weighted by the low wages prevailing in the South where about half of the Nation's hired farm workers are to be found. On the other hand, even such widely distributed processing industries as canning and preserving, flour milling, or all the food industries as a group have much less than half of their workers in the South.

Some individual types of industries are concentrated to a considerable extent in particular areas of the country, as sugar beet factories in the Mountain States or cottonseed and other vegetable-oil extracting establishments in the Southeast and Southwest. These differences in the geographic distribution of establishments need to be recognized when farm-nonfarm wage comparisons are made for selected industries.

The over-all figures on average hourly earnings for selected processing industries may first be examined for broad differences in trend and level relative to farm wage rates, before State and area differentials in farm-nonfarm wage relationships are considered. Such data are shown in table 40 along with the United States average farm wage rate and averages for two geographic divisions which roughly indicate the range of farm wage rates. In April 1944, the average hourly earnings of workers in all food industries combined were 85 cents, as compared with approximately 37 cents for farm workers paid by the day without board. Although this spread is exaggerated by the higher weighting of the South in the farm wage rates, the average for food industries was not equaled by the farm wage rates in the Pacific division, where the highest farm wage levels in the Nation prevail. Average hourly

Table 40.-Average hourly earnings of farm workers, United States and selected regions, and hourly earnings in industries processing agricultural or related products, 1932-1944

Year	Hourly earnings of		Hourly earnings of workers in: 2/							
	farm workers 1/									
	United:South				Tobacco		Cotton goods: Saw mills and			
	Cents	Cents	States:Atlantic:	Pacific:	Food industries	Manufactures	Manufactures	Logging camps	Cents	Cents
1944 (April)	36.9	26.8	77.6	84.6	69.1	62.4	77.5			
1943	32.7	22.0	65.7	79.9	64.3	59.0	72.2			
1942	24.9	17.0	48.5	72.4	58.0	54.0	63.5			
1941	19.3	14.1	33.5	65.1	52.0	46.4	55.0			
1940	15.9	12.2	27.9	61.6	49.4	41.2	50.1			
1939	15.6	11.8	27.1	61.8	47.6	38.9	47.6			
1938	15.3	11.7	27.6	61.0	46.3	39.6	44.6			
1937	16.1	11.8	29.1	58.7	44.5	41.3	43.8			
1936	14.2	10.6	25.3	53.0	41.0	36.8	39.8			
1935	13.3	10.1	23.5	52.0	39.9	37.6	38.7			
1934	12.6	9.9	22.0	50.9	---	37.8	38.9			
1933	11.1	8.4	18.7	---	---	27.7	30.0			
1932	12.0	8.9	20.8	---	---	23.9	30.6			

1/ Based on rate per day without board, using a 10-hour workday as an annual average.

2/ Bur. Labor Stat.

earnings in cotton-goods manufactures, an industry with heavy concentration in the South, attained a level of 62 cents in April 1944 as compared with the United States average hourly earnings of farm workers of 37 cents, or 27 cents in the South Atlantic States. Workers in tobacco manufactures as well as in sawmill and logging had higher average earnings in April 1944 than workers in cotton-goods manufactures.

The ratio of hourly earnings of farm laborers to those of workers in these several processing industries was higher in 1943 and in 1944 than during the years of the 1930's. However, the figures on all manufacturing industries suggest that the corresponding ratios in pre-depression years probably equaled or exceeded those of the present, though data on separate industries are not available for years before 1933.

Average hourly earnings of workers in six of the important types of food industries are shown in table 41 over approximately a decade. The much lower wage level in cottonseed crushing (52 cents an hour in April 1944) than in any other of the industries was still considerably higher than the United States average farm wage rate, 37 cents on an hourly basis. In flour milling, sugar refining, and sugar-beet factories, the wages were at about 80 cents an hour in 1943, and have increased since then. In the case of butter production, and canning and preserving, average hourly earnings in April 1944 were 70 and 78 cents, respectively.

Before this war there was a considerable differential between farm wage rates and the higher rates paid in industries that process farm products. The wage differential existed even in the case of industries that perform first processing operations, such as canning or packing of fresh fruits and vegetables, cottonseed crushing, and butter making. The spread between farm and processing labor wage rates in 1939, as throughout that decade, was especially wide in many States because of the generally depressed level of farm wage rates. ^{7/} In other States relatively low wages in processing tended to narrow the spread between the two types of rates.

Since the outbreak of the present war in Europe, farm wage rates have climbed from their low level at a generally more rapid rate than wages of workers in processing industries. As a result, the large differential in wages between farm and processing labor that existed in 1939 was considerably narrowed by October 1942. The later inauguration of controls on nonagricultural wages through the wage-stabilization regulations on the

^{7/} Data by States on average hourly earnings in fruit and vegetable packing and canning industries for 1938-39 are contained in two mimeographed publications: Tables Relating to the Fresh Fruit and Vegetable Packing Industry in Selected States and for Selected Products and Report on the Fruit and Vegetable Canning Industry Under the Fair Labor Standards Act, Wage and Hour Div., U. S. Dept. of Labor, May 1940; also in Bulletin No. 176, Women's Bureau, U. S. Dept. of Labor. A comparison of the wage data for these processing industries with available farm-wage data are indicative of the differentials then existing.

Table 41.--Average hourly earnings of workers in selected food and processing industries, United States
1932-1944 1/

Year	Canning : and : pre- : serving	Flour : mill- : ing	Butter : pro- : duction	Sugar : refining	Beet : sugar : manu- : facturing	Cotton : seed : crushing
	Cents	Cents	Cents	Cents	Cents	Cents
1944 (April)	77.5	82.8	70.2	82.5	99.4	52.0
1943	71.5	80.1	65.0	81.1	86.1	46.5
1942	62.0	72.0	57.9	74.5	77.9	39.9
1941	52.4	63.9	51.6	67.0	68.1	35.4
1940	46.5	61.1	48.6	64.6	61.4	33.5
1939	46.4	60.5	48.4	63.6	58.5	30.2
1938	45.4	59.3	48.3	61.3	57.8	26.0
1937	45.7	57.1	46.6	62.9	57.4	23.9
1936	39.3	53.6	44.3	57.9	49.5	22.0
1935	38.3	54.8	---	56.8	49.8	22.8
1934	---	53.5	---	54.9	48.0	22.9
1933	---	46.0	---	---	42.6	---
1932	---	45.3	---	---	---	---

1/ Bur. Labor Stat.

National War Labor Board, together with the continued upward movement of farm wage rates, brought a further narrowing of the spread between farm and processing labor wages in some States.

In California, for example, the ratio of hourly earnings of farm workers to those of workers in the canning and preserving industry climbed from 0.63 to 0.85 from October 1939 to October 1943 as farm wages rose from \$2.85 per day without board to \$6.90, and as hourly earnings in the canning and preserving industry increased from 50 cents to 90 cents (table 42). In Indiana, the ratio increased steadily from 0.52 in October 1939 to 0.67 in October 1943. In Maryland, however, the ratio of hourly earnings for farm workers to those of workers in canning and preserving establishments increased from 0.64 in October 1939 to 0.88 in October 1942, but declined by October 1943. Farm wage rates have also risen somewhat more rapidly since 1939 than wages in other types of processing such as cottonseed crushing and butter production. Nevertheless, a fairly wide spread between the average farm wage rate and the hourly earnings in such industries continued as recently as in October 1943.

Although the day rate without board is the best available indicator of the average hourly earnings within a State for a wide variety of types of farm work, it should be recognized that there are groups of laborers working at piece rates in different crops whose hourly earnings may be higher or lower than the average earnings indicated by the day rate. The hourly earnings of seasonal workers in camps formerly operated by the Farm Security Administration illustrate situations where piece rates for special crop operations generally yielded higher earnings than the prevailing farm wage rate per day without board (tables 42 and 43).

Data compiled by State agencies on average hourly earnings of workers in processing and other manufacturing industries are brought together in table 43. These data illustrate the situation in regard to competitive wages that farmers face in different States and the State variations in levels of farm and nonagricultural wage rates. The situation in California is of special interest because that is an area in which farm wage conditions have been affected to a greater extent than in most other States as a result of the intense competition for labor by war and other essential industries. Partly because of this situation, the program of stabilizing agricultural wages has been especially active in California.

The average farm wage rate per day without board in California was at a level of approximately \$7 from October 1943 to the middle of 1944. At this level the hourly and daily earnings yielded by the general farm day wage are not materially different from the earnings of California seasonal workers in specialized crops paid at piece rates. For some individual crops, as in asparagus, the earnings per day in the 1943-44 season averaged higher whereas in other crops, such as cotton, they averaged less. Daily earnings per worker in the 1943 season of \$7 to \$9 are reported for workers in tomatoes, grapes, oranges, olives, walnuts, potatoes, other vegetables, and hay and grain work. In cotton picking, which requires a large number of workers, daily earnings in the 1943-44 season are reported to have averaged only \$6.

Table 42.- Average hourly earnings of hired farm workers and of workers in specified processing industries, selected States, 1939, 1942, and 1943

State, year, and month	Hourly earnings of farm workers		Hourly earnings from farm wage rates per day without board as percentage of hourly earnings in specified processing industries	
	From rate per day without board 1/	Seasonal workers (in FSA camps) 2/	in specified processing industries 3/	
	Cents	Cents	Cents	Percent
<u>C a n n i n g a n d p r e s e r v i n g</u>				
<u>California</u>				
Oct. 1943	76.7	---	90.2	85.0
Oct. 1942	61.1	70.6	77.2	79.1
Oct. 1939	31.7	---	50.0	63.4
<u>Maryland</u>				
Oct. 1943	41.0	---	55.4	74.0
Oct. 1942	37.5	34.8	42.4	88.4
Oct. 1939	19.5	---	30.4	64.1
<u>Indiana</u>				
Oct. 1943	40.5	---	60.4	67.1
Oct. 1942	34.5	---	56.0	61.6
Oct. 1939	20.0	---	38.5	51.9
<u>C o t t o n s e e d c r u s h i n g</u>				
<u>Texas</u>				
Oct. 1943	34.0	---	49.1	69.2
Oct. 1942	26.0	35.6	41.0	63.4
Oct. 1939	13.0	---	30.9	42.1
<u>Mississippi</u>				
Oct. 1943	20.5	---	44.9	45.7
Oct. 1942	16.0	---	36.4	44.0
Oct. 1939	9.5	---	28.0	33.9
<u>B u t t e r p r o d u c t i o n</u>				
<u>Wisconsin</u>				
Oct. 1943	44.0	---	65.4	67.3
Oct. 1942	37.5	---	54.9	68.3
Oct. 1939	20.5	---	46.8	43.8
<u>Iowa</u>				
Oct. 1943	52.0	---	60.6	85.8
Oct. 1942	41.5	---	53.8	77.1
Oct. 1939	23.5	---	46.3	50.8

1/ Based on State average farm wage rate per day without board, using a 10-hour day in States other than California where a 9-hour day was used.

2/ Employment and Earnings of Residents of FSA Farm Labor Supply Centers, Farm Security Adm., February 1943.

3/ Data for California from California Labor Statistics Bulletin, Div. of Labor Stat. and Law Enforcement, State of California; data for other States furnished by Bur. of Labor Stat., U.S. Dept. Labor. Changes in the composition of the reporting sample from one period to another have some influence on the average hourly earnings.

Table 43.-Average hourly earnings of hired farm laborers and of workers in selected industries, by selected States, 1939-44 ^{1/}

State and industry or occupation	1944 :		1943 :		1942 :		1941 :		1939	
	:April:Oct.:		July:April:Oct.:		July:April:Oct.:		July:April:Oct.:		July:April:Oct.:	
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
<u>California</u>										
Agriculture ^{2/}	0.77	0.77	0.69	0.66	0.61	0.48	---	0.36	---	---
All manufacturing industries	1.22	1.18	1.13	1.14	1.07	1.01	---	.84	---	---
Food and kindred products	1.02	.98	.98	.95	.86	.82	---	.68	---	---
Sugar beets	1.16	.98	1.02	1.03	.87	.91	---	.84	---	---
Canning and preserving fruits and vegetables	.90	.90	.88	.84	.77	.72	---	.58	---	---
Fish canning and packing	1.02	1.00	.97	1.01	.98	.92	---	.73	---	---
Dairy products	.94	.89	.86	.85	.83	.81	---	.67	---	---
Meat products	1.06	1.05	1.01	.98	.94	.90	---	.82	---	---
Grain mill products	1.05	1.06	1.05	1.02	1.01	.91	---	.82	---	---
Tobacco manufactures	.88	.86	.80	.77	.74	.70	---	.64	---	---
Textile mills--fabrics	.84	.82	.76	.74	.68	.67	---	.56	---	---
Logging and sawmills	1.19	1.17	1.15	1.05	1.01	.97	---	.84	---	---
Aircraft and parts	1.15	1.11	1.07	1.04	.96	.96	---	.81	---	---
Shipbuilding and repairing	1.42	1.37	1.37	1.34	1.34	1.22	---	1.16	---	---
<u>Indiana</u>										
Agriculture ^{2/}		.40	.38	.34	.34	.30	.26	.26	.20	.20
All manufacturing industries		.99	.96	.94	.90	.86	.80	.78	.69	.68
Dairy products		.62	.59	.56	.55	.50	.46	.44	.47	.50
Slaughtering, meat packing		.81	.88	.84	.76	.74	.72	.66	.62	.64
Tobacco manufactures		.84	.52	.52	.44	.42	.36	.35	.36	.37
Planing and sawmills		.51	.50	.50	.50	.46	.44	.42	.48	.48
<u>Pennsylvania</u>										
Agriculture ^{2/}		.40	.39	.36	.34	.32	.28	.28	---	---
All manufacturing industries		.93	.90	.90	.85	.83	.76	.74	---	---
Food products		.80	.71	.76	.71	.72	.64	.67	---	---
Textiles		.74	.78	.70	.86	.64	.60	.57	---	---
<u>Wisconsin</u>										
Agriculture ^{2/}		.44	.42	.38	.38	.33	.29	.28	.20	.20
All manufacturing industries ^{3/}		.95	.93	1.01	.87	.85	.77	.75	.65	.64
Food and kindred products		.85	.83	---	.76	.77	.70	.68	.64	.64
Textile mill products		.72	.69	---	.64	.65	.58	.56	.54	.54
<u>North Carolina</u>										
Agriculture ^{2/}		.25	.23	---	.20	---	---	---	---	---
All manufacturing industries		.64	.64	---	.57	---	---	---	---	---
Lumber (including planing mills)		.52	.50	---	.48	---	---	---	---	---
Tobacco products		.71	.72	---	.73	---	---	---	---	---

- ^{1/} Nonagricultural hourly earnings compiled from reports issued by State agencies.
^{2/} Based on State average farm wage rates per day without board using a 10-hour day for States other than California, and a 9 to 9.5 hour workday for California.
^{3/} Excluding canning and preserving.

Thus the average hourly earnings figure obtained from the prevailing farm day rate for the State of California appears to be an appropriate figure to compare with the average hourly earnings of workers in nonagricultural industries.

In October 1943, a time of peak operations both in field work and in processing establishments, the hourly earnings of farm workers in California averaged approximately 77 cents as compared with an average of 90 cents in the fruit and vegetable canning and preserving industry, 89 cents in dairy products manufactures, and 98 cents in beet sugar manufacturing. Average hourly earnings of California workers in all food-manufacturing industries in October 1943 were 98 cents, and in April 1944 \$1.02. Hourly earnings of farm workers in April of this year continued in the State at the same level as in October 1943.

As the hourly earnings of workers in food and other processing industries include payment for overtime at premium rates, the actual spread between farm wage rates and basic or straight-time rates in these industries is narrower than indicated by the figures on hourly earnings. It is probable that hourly earnings at straight-time rates in fruit and vegetable canning in California in October 1943 may have been approximately equal to the average hourly earnings indicated by the farm wage rate per day without board.

A similar relationship between farm and processing wages probably held with respect to dairy products, tobacco manufactures, and textile-mill products (fabrics). Although a substantial differential continues in California between farm wage rates and wages in all manufacturing industries combined, the differential has disappeared or greatly narrowed between farm wage rates and basic wage rates in the types of industries closely allied to agriculture, and utilizing similar types of labor.

Comparative hourly earnings from farm work and agricultural processing and other industries are also shown in table 43 for 4 other States, Indiana, Pennsylvania, Wisconsin, and North Carolina. In each of these States, and for every date shown, the average hourly earnings obtained from farm day rates are substantially lower than those from any of the industries shown, averaging about one-half in most cases. In these States, unlike the situation in California, the differentials between farm wage rates and wage rates in processing establishments have apparently not disappeared, even when allowance is made for the boosting of hourly earnings in these industries above the basic wage rates by the inclusion of earnings at overtime rates.

Wage Rates of Seasonal Farm Workers

Comparative hourly or daily earnings of farm workers and those of other groups based on the available farm wage rates per day are not entirely satisfactory in the case of some groups of seasonal farm workers who work in specialized crops on a piece-rate basis. The reported day rates may not fully reflect the equivalent daily earnings of workers in some fruit, vegetable or other crops where piece rates prevail or where employees are hired through

labor contractors. 8/

Data for a number of States where the production of fruits and vegetables is important suggest that under recent conditions the earnings from piece rates or hourly rates of workers employed for short periods in perishable, seasonal crops have averaged higher than the earnings from the prevailing day rates. Comparisons of hourly earnings of farm workers housed in labor-supply centers maintained by the Farm Security Administration with the average day rates in several States are shown in table 44. Practically all in these centers were seasonal workers whose earnings came mainly from work in specialized fruit and vegetable crops, much of the work being paid on a piece-rate basis. In many of the States, the hourly earnings of these seasonal workers in October 1942 were from 20 to 40 percent higher than from the prevailing day rate, with the differences in hourly earnings narrowing somewhat in 1943.

Prevailing piece rates paid for seasonal operations in sugar-beet work 9/ have also yielded average daily earnings per worker higher than the average farm wage rate per day without board in principal sugar beet producing States (table 45). This was generally true in 1943 as well as in 1939, although in the former year the differentials were less than in a pre-war year like 1939.

There are some indications, however, that under plentiful labor supply conditions the reported day rates may be higher than average daily earnings of piece rate workers, while under labor scarcity conditions the reverse may be true. The relative perishability of the crop as well as the prevailing price conditions also affects the relation between daily earnings from the two types of wages. Thus, for example, in 9 out of 13 important cotton producing States, the estimated average daily earnings from cotton picking in 1943 exceeded the reported farm wage rates per day without board prevailing at cotton harvest time (table 46). In 1939, however, when the available labor supply far exceeded the demand and when cotton prices were much lower, the average daily earnings of cotton pickers were lower than the prevailing day rates (without board) in 9 of the 13 States and were equal to the day rates in 2 other States. Apparently the shorter labor supply in 1943 and the need for picking the cotton crop within a limited time period to assure retention of lint quality have tended to cause cotton picking rates to advance more rapidly since 1939 than the wage rates for the type of workers customarily hired by the day.

Annual Wage Earnings of Farm Laborers and Industrial Workers

Comparisons over a long period of time of wage rates or of hourly earnings in agriculture and industry do not fully reflect changes in average weekly or annual wage income per worker because of changes in the length of workweek of industrial workers which have occurred over the past 33 years.

8/ R. F. Hale and R. L. Castineau, Reliability and Adequacy of Farm Wage Rate Data, U. S. Dept. of Agr., Agricultural Marketing Service, Feb. 1940

9/ Wage rates for sugar beet work referred to here are those set by the Dept. Agr. under the provisions of the Sugar Act.

Table 44.-Comparisons of hourly earnings of seasonal workers in FSA labor-supply centers with equivalent hourly earnings from prevailing farm wage rates per day without board, selected States, July and October 1942, March 1943.

State	Hourly earnings		Hourly earnings		Hourly earnings		Hourly earnings of workers in	
	March 1943 1/		October 1942		July 1942		FSA centers as percentage of	
	:Based on	:Workers:rate per	:Based on	:Workers:rate per	:Based on	:Workers:rate per	:day without board	:day without board
	:in FSA :day without:	:in FSA :day without:	:in FSA :day without:	:in FSA :day without:	:in FSA :day without:	:in FSA :day without:	:in FSA :day without:	:in FSA :day without:
	centers:board 2/	centers:board 2/	centers:board 2/	centers:board 2/	centers:board 2/	centers:board 2/	centers:board 2/	centers:board 2/
	Cents	Cents	Cents	Cents	Cents	Cents	Percent	Percent
Arizona	44.1	45.6	48.5	36.8	---	---	97	132
Arkansas	---	---	26.8	20.5	---	---	---	131
California	72.5	65.6	70.6	61.1	56.1	47.8	111	116
Connecticut	---	---	48.1	40.5	---	---	---	119
Delaware	---	---	49.0	43.0	---	---	---	114
Florida	36.5	26.9	32.1	22.3	38.1	18.4	136	144
Idaho	50.5	48.5	59.7	48.5	48.2	41.0	104	123
Maryland	---	---	34.8	37.5	33.1	29.0	---	93
New Jersey	---	---	50.9	40.0	49.3	36.0	---	127
New York	---	---	52.0	42.5	---	---	---	122
Oregon	---	---	73.3	56.8	58.3	44.7	---	129
Texas	33.4	26.0	35.6	26.0	24.1	20.5	127	137
Virginia	---	---	37.9	25.5	---	---	---	149
Washington	---	---	62.1	61.0	64.2	48.5	---	102
								132

1/ The April 1 farm wage rate per day without board was used for March 1943.

2/ Using a 10-hour day for States other than California, Arizona, Oregon, Florida where a 9-to 9.5 hour day was used.

Table 45.-Comparison of estimated average earnings per day in sugar beet work for summer and fall operations with average farm wage rates per day without board, for selected States, 1939 and 1943 1/

	1943 2/			1939				
State	:Blocking :Average farm: :and thin-:wage per day: :ing sugar:without :beets :board, July 1: sugar beets:board, Oct. 1:	:Average farm :Blocking :Average farm: :wage per day :and thin-:wage per day: :ing sugar:without :ing sugar:without :beets :board, July 1: sugar beets:board, Oct. 1:	:Average farm: :wage per day: :Harvesting :without :sugar beets:board, Oct. 1:	:Average farm: :wage per day: :Harvesting :without :sugar beets:board, Oct. 1:	:Average farm: :wage per day: :Harvesting :without :sugar beets:board, Oct. 1:	:Average farm: :wage per day: :Harvesting :without :sugar beets:board, Oct. 1:		
Michigan	5.00	4.30	5.82	4.70	3.33	2.25	3.94	2.25
Minnesota	5.45	4.70	5.51	5.50	3.64	2.35	3.64	2.55
Nebraska	5.45	4.60	6.90	5.10	3.64	1.95	4.40	1.80
Colorado	5.45	4.40	6.90	5.20	3.64	2.10	4.40	2.10
Montana	6.78	5.40	7.00	6.50	4.84	2.60	4.45	2.70
Wyoming	6.21	4.90	6.89	5.40	4.39	2.30	4.39	2.30
Utah	5.79	4.70	7.00	4.80	4.21	2.60	4.50	2.60
Idaho	5.79	5.40	7.00	6.30	4.21	2.50	4.50	2.55
Washington	5.79	6.80	7.25	8.00	3.95	2.60	5.00	2.75
California	5.66	6.45	7.25	6.90	3.82	2.80	4.38	2.85

1/ Earnings per worker per day in the specified sugar beet operations are estimates prepared by the Sugar Branch, War Food Administration, U. S. Dept. of Agr. These estimates are based on the average performance in a 10-hour day of experienced adult workers under normal field conditions, and the wage rates for sugar beet work set by the Dept. Agr.

2/ Because in some areas higher wage rates were paid in 1943 for sugar beet work than the minimum rates set by the Dept. Agr. the daily earnings of sugar beet workers were higher in relation to the general farm wage rate per day without board than the above figures suggest. On the other hand, the daily earnings from sugar beet wage rates per day without board are averages for all types of workers.

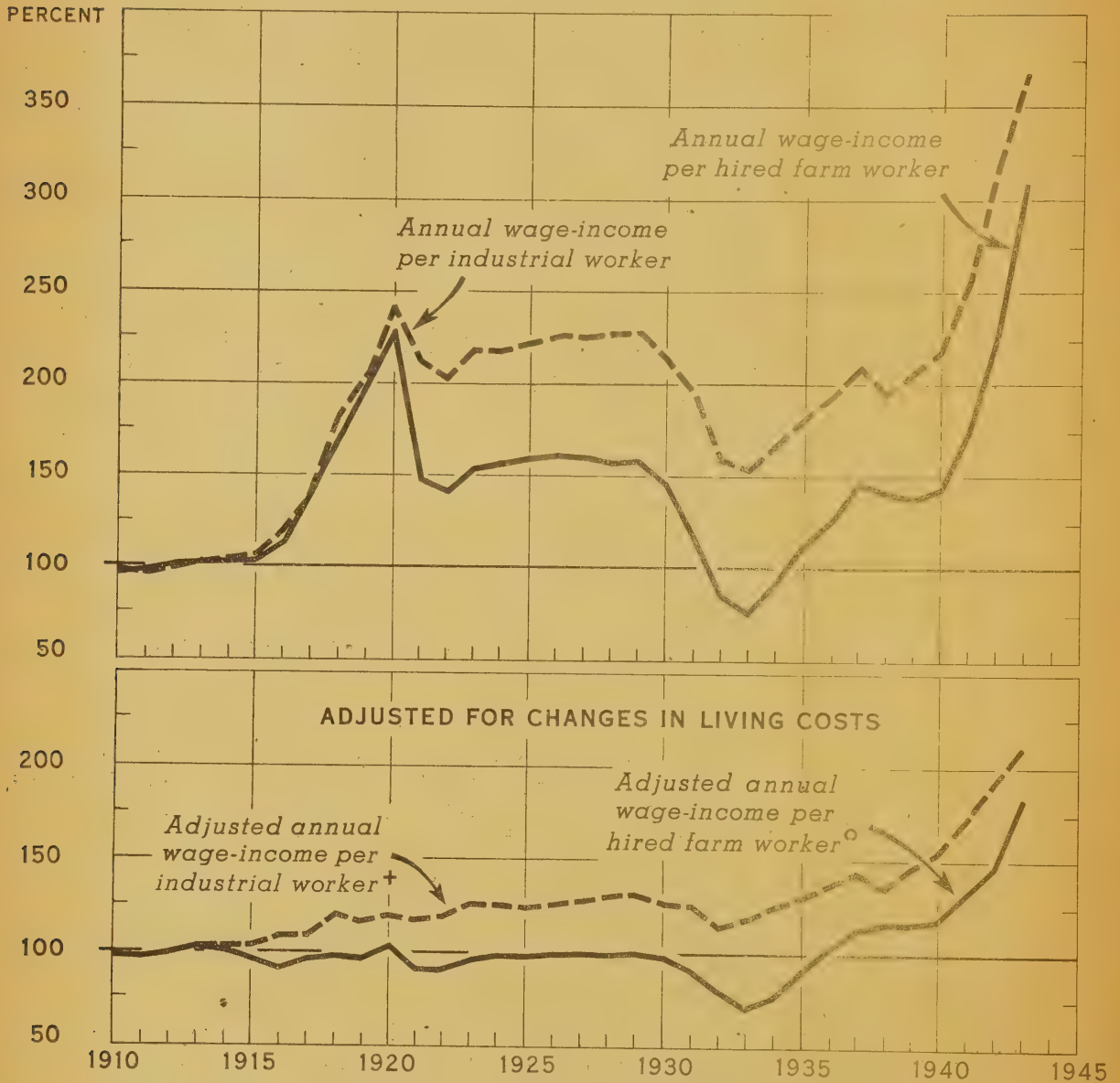
Table 46.-Comparisons of average estimated daily earnings in cotton picking with average farm wage rates per day without board, in principal cotton States, 1939 and 1943

State	1943										1939			
	Rate for		Estimated:Prevailing		Daily earnings:Rate for		Estimated:Prevailing		Daily earnings		Estimated:Prevailing		Daily earnings	
	picking		daily		from cotton		daily		picking as		daily		from	
	:100 pounds:earnings	:rate per	:earnings	:rate per	:picking as	:100 pounds:earnings	:rate per	:earnings	:rate per	:picking as	:100 pounds:earnings	:rate per	:earnings	:rate per
	:of seed	:per adult:day with-	:of seed	:percentage of	:of seed	:percentage of	:of seed	:of seed	:percentage of	:of seed	:percentage of	:of seed	:percentage of	:of seed
	:cotton	:picker 1/10:out board 2/	:cotton	:day rate	:cotton	:day rate	:cotton	:day rate	:cotton	:day rate	:cotton	:day rate	:cotton	:day rate
	Dollars	Dollars	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Missouri	2.00	3.50	3.30	106	.75	1.31	1.45	90						
North Carolina	1.75	3.06	2.50	122	.60	1.05	1.20	88						
South Carolina	1.25	2.19	1.65	133	.50	.88	.85	104						
Georgia	1.30	2.28	1.90	120	.50	.88	.90	98						
Tennessee	1.80	3.15	2.15	147	.60	1.05	1.05	100						
Alabama	1.40	2.45	2.10	117	.50	.88	.90	98						
Mississippi	1.70	2.98	2.05	145	.60	1.05	.95	111						
Arkansas	1.70	2.98	2.45	122	.60	1.05	1.05	100						
Louisiana	1.50	2.62	2.25	116	.55	.96	1.10	87						
Oklahoma	1.95	3.41	3.50	97	.65	1.14	1.45	79						
Texas	1.80	3.15	3.40	93	.55	.96	1.30	74						
New Mexico	2.00	3.50	3.70	95	.65	1.14	1.70	67						
Arizona	2.70	4.24	4.55	93	.90	1.48	2.05	72						

1/ Estimated on the basis of 175 pounds of seed cotton picked in a 10-hour day representing the season average performance of a mature picker. For Arizona, an allowance has been made for the smaller number of pounds of long-staple cotton picked per day.
2/ October 1.

ANNUAL WAGE INCOME PER HIRED FARM WORKER* AND PER INDUSTRIAL WORKER^Δ, UNITED STATES, 1910-43

INDEX NUMBERS (1910-14=100)



- * ESTIMATED TOTAL FARM WAGE BILL DIVIDED BY ANNUAL AVERAGE HIRED FARM EMPLOYMENT.
- Δ BUREAU OF AGRICULTURAL ECONOMICS; ESTIMATES BASED ON PAYROLL AND EMPLOYMENT DATA FOR FACTORY, MINING, AND RAILROAD EMPLOYEES.
- ADJUSTED FOR CHANGES IN LIVING COSTS BY INDEX OF PRICES FARMERS PAY FOR GOODS USED IN FAMILY LIVING (1910-14 DOLLARS).
- + ADJUSTED FOR CHANGES IN LIVING COSTS BY BUREAU OF LABOR STATISTICS INDEX OF COST OF LIVING (1913 DOLLARS).

An approximation to wage income per worker for a given period of time is afforded by dividing wage bill or pay roll totals by the average employment for the period. Estimates for 1943 indicate that the annual average wage income of workers in manufacturing, mining, and railroads was \$2,156 as compared with an average of \$803 (including the value of perquisites received) per hired farm worker. Relative changes in the annual wage income of industrial and farm workers since 1910 are shown in figure 16.

The two indexes show the same general pattern as those for hourly earnings, but with less disparity between the two since 1920 than in the case of hourly earnings. Because of reduced length of industrial workweeks during the depression, annual wage income for industrial workers shows a steeper decline than do hourly earnings during the 1930's, with a more gradual recovery to 1940. With the lengthening of workweeks since war began, however, wage income to industrial workers has shown a steeper increase than hourly earnings. In the case of farm workers, the annual earnings showed a more rapid recovery from the 1933 low than did hourly earnings, and also a more rapid rise since 1940. Nevertheless, in 1943 the hired farm worker's annual real wage income was only \$472 in terms of 1910-14 dollars (or in terms of 1913 dollars), while industrial workers' real wage income was \$1,233 in terms of 1913 dollars. 10/

The measure of income parity specified in the Agricultural Adjustment Act of 1938 aims toward a reestablishment of the 1910-14 ratio of the per capita net income received by persons on farms from farming to the per capita income of persons not on farms. Although this parity measure includes the wage income of hired farm workers who live on farms, it is almost entirely a measure of the comparative position of the farm income of operators and their families as against the income of the nonfarm population (in terms of the 1910-14 situation). Farmers' net income, in terms of this standard, has exceeded the parity level since 1914 only in the World War I period (1917-20), and in the years, 1935, 1937, and 1941-43 (fig. 17). In 1942, the per capita net farm income was 35 percent above the parity level, and in 1943 it was 43 percent above. 11/ In the long stretch between 1920 and 1935 and again from 1938-40, income from farming stayed below the parity level, and dropped precipitously in the depressions of the early 1920's and 1930's.

No "parity" measure exists for comparing the relative income position of hired farm workers with that of nonfarm wage workers. Data are not available for developing a parity measure for hired farm workers that is strictly comparable to the farmers' parity standard. However, the degree of disparity between the average annual wage incomes of hired farm laborers and the corresponding average for industrial workers may be roughly measured by their current relationships in terms of the 1910-14 situation. 12/ With the

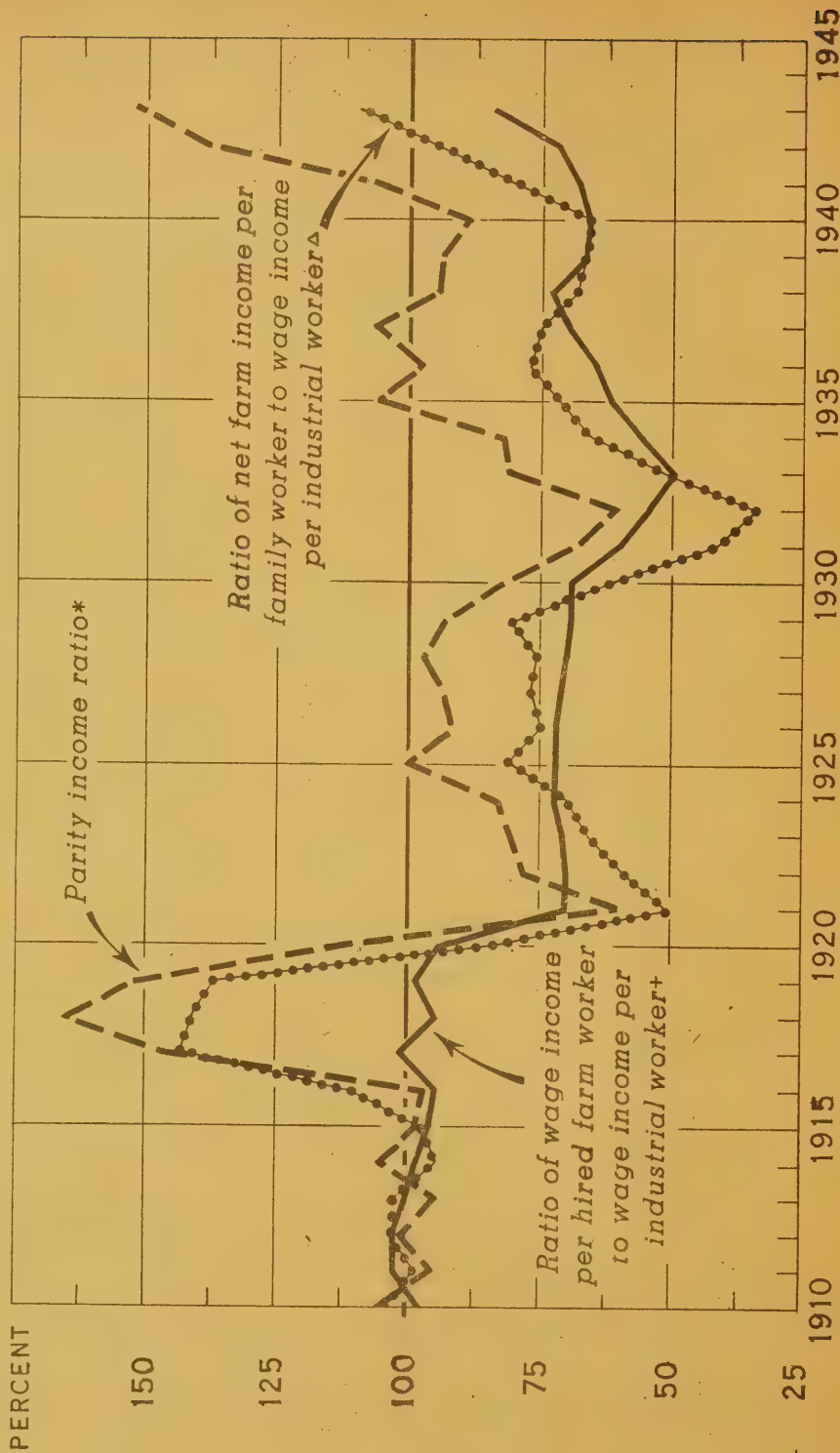
10/ See figure 21 in Chapter 9.

11/ These figures include revisions which have not been incorporated in figure 17.

12/ The ratio of the index of wage income per hired farm worker to the index of wage income per industrial worker (employees in railroad, mining, and manufacturing industries) with 1910-14 as base period for both indexes.

PARITY INCOME RATIO AND RATIOS OF WAGE INCOME PER HIRED FARM WORKER AND NET FARM INCOME PER FAMILY WORKER TO WAGE INCOME PER INDUSTRIAL WORKER, UNITED STATES, 1910-43

INDEX NUMBERS (1910-14=100)



*RATIO OF INDEX OF PER CAPITA NET INCOME OF PERSONS ON FARMS FROM FARMING TO INDEX OF PER CAPITA INCOME OF PERSONS NOT ON FARMS.

+ INDUSTRIAL WORKERS INCLUDE FACTORY, MINING, AND RAILROAD EMPLOYEES.

Δ FAMILY WORKERS INCLUDE FARM OPERATORS AND UNPAID FAMILY WORKERS.

average income per industrial worker used as a standard, a similar comparison may be made of the average net income from farming per farm family worker. The courses of these two measures from 1910 to 1943 are shown along with the parity income index in figure 17.

For the index relating to hired farm workers, a value of 100 in a given year would mean that their average wage income bore the same relationship to the average wage income of industrial workers as existed in 1910-14. In the period 1910-14, however, wages of farm workers averaged only 46.5 percent of industrial workers' annual wages. Since the base period 1910-14, the ratio of the index of annual average wage income per hired farm worker to the index of average wage income per industrial worker has gone above 100 only in the one year 1917. Despite the sharp improvement in farm wage rates during the last several years, the ratio in 1942 was still only 72 percent and for 1943 only 80 percent. In other words, to have reached a "parity-period" balance with industrial wage income, farm wage earnings would have had to be 25 percent higher in 1943 than they actually were. The ratio of net farm income per family worker to income per industrial worker in 1942 was 94 percent and in 1943, 105 percent of its 1910-14 value. To have reached a similar index of 105 in 1943, farm laborers would have had to receive wages 30 percent higher than they did. 13/

13/ The 1942-43 figures in this paragraph include revisions which have not been incorporated in figure 17. Except for 1943, all of the revisions were very minor.

EARNINGS AND WELFARE OF FARM WAGE WORKERS AND THEIR FAMILIES

In a seasonal industry such as agriculture, in which the number of laborers hired in a peak month is about double that hired in a slack month, it is especially necessary to supplement the data on wage rates with information on time worked and annual earnings. Many hired farm workers do not have year-round farm employment and their earnings from farm work must be supplemented by earnings from nonfarm work. Although under wartime conditions work is relatively easy to get in most areas during the part of the year when farm work is slack, in more normal times finding work during the off-season is a major problem of farm workers.

The data on annual wage income of industrial or farm workers referred to in the preceding chapter are in terms of income received by the average number of persons employed in the course of a year. As the number of different persons working during a year is much larger than the number in the annual employment average, the actual average wage income of individual workers is a lower figure. In other words, the annual wage income of industrial workers or of farm workers derived from pay roll or wage bill estimates, in conjunction with estimates of annual average employment, is in effect an estimate of wages per man-year of work.

The amount of wages per man-year of work is not a completely satisfactory substitute for average annual earnings of individual workers, since a man-year of work in any given industry may represent the work of more than one individual, depending on the duration of employment of workers. In agriculture, the irregularity of employment arising from the seasonality of work leads to actual annual earnings that are considerably lower than the amount of wages per man-year of work.

No historical series exist to provide a basis of comparison of average annual income actually received by farm laborers with that of nonagricultural workers over a period of years. The information on average wages paid per man-year of work in industry and in agriculture, as presented in table 47, only approximates such a comparison. The comparison indicates that the farm laborer has fared much worse than the industrial worker during the last 34 years. In the period 1910-14, farm wages per man-year of labor were only 46.5 percent of the average wages for industrial workers and the percentage declined steadily to a low of only 27.6 percent during the 1930-34 period. ^{1/} Since

^{1/} In this comparison, no significant overstatement of the spread between farm and industrial wages per man-year can be attributed to the value placed on perquisites furnished hired farm hands. Although farm products furnished to hired workers have been evaluated on the basis of prices received by farmers for farm products, the proportion that such perquisites comprise of the total wage bill is very small. The bulk of the perquisites is in the form of board, lodging, and housing, and it is not possible to learn whether the valuation is on the basis of the cost to the farmer or what might be the cost to the laborer were he to provide himself with similar board, lodging, or housing.

Table 47. -Comparisons of wages per man-year of work for industrial and agricultural workers, 5-year averages, 1910-39, and single years 1940-43, United States

Period	Industrial workers 1/ Dollars	Hired farm workers 2/ Dollars		Value of perquisites : Dollars	Farm wages as a percent of industrial wages Percent
		Total :	Cash :		
		Dollars	Dollars		
1943 3/	2,156	803	679	124	37.2
1942	1,847	616	503	113	33.4
1941	1,495	473	382	91	31.6
1940	1,273	390	309	80	30.6
1935-39	1,149	362	282	80	31.5
1930-34	1,038	287	209	78	27.6
1925-29	1,316	433	323	110	32.9
1920-24	1,275	450	332	118	35.3
1915-19	877	394	281	113	44.9
1910-14	583	271	191	81	46.5

1/ Includes factory, mining, and railroad employees; estimates are based on Bur. Labor Stat. and Interstate Commerce Commission data on average employment and pay rolls.

2/ Total farm wage bill divided by annual average hired farm employment.

3/ Preliminary.

then, the relative position of farm laborers has improved somewhat. Not until the year 1942, however, did the farm wages per man-year of labor exceed the 5-year average for the 1925-29 period of 32.9 percent of average industrial wages. Even though the percentage increased to 37.2 percent in 1943, this was still lower than that prevailing during the 1915-19 period.

The striking feature about the figures is that even though employment for 12 months of the year is assumed, the resulting hypothetical annual earnings for farm laborers have been and still are so low. In the 30 years preceding 1940, the average farm wages paid per man-year of hired labor amounted to only \$366, including \$270 in cash wages and \$96 in perquisites. The amount has increased markedly since the war began in Europe, but the average wage per man-year of hired farm labor was only \$616 in 1942 and \$803 in 1943.

Not much information is available on actual rather than hypothetical annual earnings of farm laborers and their families for years before 1930. During the 1930-40 decade a number of sample studies of farm laborers were made in selected localities ^{2/}, but differences in the methods used prevent national summaries or even regional comparisons in most cases. ^{3/} The nearest approach to a national survey was a study made during 1935-36 in 11 counties representing the principal type-of-farming areas of the country. ^{4/} When the results from these 11 counties are roughly weighted together in proportion to the number of hired farm workers in the several type-of-farming areas, they show an average money income per farm-laborer family of about \$268, including \$227 as earnings from farm labor and \$35 from nonagricultural work (table 48). The annual money income of farm-laborer families included in the 11-county survey varied from an average of \$127 in Fentress County, Tenn., a subsistence-farming area, to \$572 in Placer County, Calif., a deciduous-fruit area. In Wayne County, Penn., a dairy area, total annual money earnings of farm-laborer families were second highest, averaging \$335.

The more useful information on annual earnings of farm laborers and their families are data relating to fairly recent periods which at the same time are relatively free from the inflationary affects of war conditions and from the effects of abnormally depressed conditions. Certain 1940 Census data recently released, provide for the first time, on a Nation-wide basis, information on annual income and amount of employment during 1939 for individual farm laborers and on income and other indications of level of living for farm-laborer families. ^{5/} For a more recent year, 1941, special tabulations of data gathered

^{2/} For a list of studies and a summary of results see Ernest J. Holcomb, Income and Earnings of Farm Laborers, U. S. Dept. Agr., Bur. Agr. Econ. Wash. D. C., May 1940.

^{3/} The Consumer Purchase Study of 1935-36 classified farm laborers and their families in the rural nonfarm population and did not make separate tabulations of their income and expenditures.

^{4/} Tom Vasey and Josiah C. Folsom, Survey of Agricultural Labor Conditions, (for each of 11 counties) U. S. Dept. Agr., Farm Sec. Adm. and Bur. Agr. Econ. Washington, D. C., 1937.

^{5/} Sixteenth Census of the United States, 1940, Population and Housing Bull. as indicated in source notes of tables. Information on wage and salary income was obtained from all individuals, but some of the more detailed tabulations were made by the Bureau of the Census for only a representative sample of the Census returns.

Table 48.-Average money income of farm-laborer families by source of income, 11 sample counties of the United States, September 1935-August 1936 ^{1/}

County and State	:Type-of-farming area:	:Average money income per family from:			
		:Agricultural:Nonagricultural:			
		Total : earnings : Dollars	: earnings : Dollars	: earnings : Dollars	:Relief Dollars
Weighted average of 11 counties 2/					
	- - -	267.63	226.92	34.96	5.75
Wayne Co., Pa.	Dairy	355.32	285.96	68.04	1.31
Livingston Co., Ill.	Corn	317.47	286.36	21.56	9.55
Hamilton Co., Iowa	Corn-hog	316.70	292.57	19.11	5.02
Lac Qui Parle Co., Minn.	Wheat	209.82	185.26	21.07	3.49
Karnes Co., Texas	Cotton	171.91	162.13	8.41	1.36
Placer Co., Calif.	Deciduous Fruit	572.19	529.75	34.94	7.50
Concordia Co., La.	Cotton	137.09	100.04	31.02	6.02
Todd Co., Ky.	Tobacco	191.06	168.60	19.10	3.36
Pawnee Co., Kan.	Wheat	261.89	212.05	42.36	7.48
Archuleta Co., Colo.	Stock Range	304.84	224.13	61.05	19.66
Fentress Co., Tennessee	Self-Sufficing	126.78	69.06	42.51	15.21

^{1/} Based on an 11-County Survey of Agricultural Labor Conditions by Tom Vasey, Farm Sec. Adm. and Josiah C. Folsom, Bur. Agr. Econ., adapted from statement of Paul S. Taylor in Hearings, Special Committee to Investigate Unemployment and Relief, United States Senate, 75th Cong., 3rd Sess., Feb. 28-April 8, 1938.

^{2/} Estimated by weighting county data in proportion to the number of hired farm workers in the type-of-farming area represented by the county.

the study of Family Spending and Saving in Wartime also provide some information on the annual earnings and value of family living for farm laborers, with comparable information for farm operators. 6/

Individual Laborers' Income, 1939

The 1940 Census information on wage and salary income of individuals is tabulated by the industrial or occupational classification of the individuals during March 24-30, 1940, the week immediately preceding the decennial Census. Thus the 1939 income data to be presented for farm laborers relate only to persons who were actually working as paid farm laborers during the Census week, to persons who had jobs as farm laborers but were not actually working because of sickness, weather, etc., or to unemployed persons (excluding those on public emergency work who were seeking jobs and indicated that their last occupation was that of a paid farm laborer. 7/

Annual cash wage and salary income distribution of these farm laborers is shown in table 49 and figure 18, with a similar income distribution of all other laborers (except mine) for comparison. Persons in nonagricultural occupations classified as laborers by the Census are primarily persons doing common or unskilled labor in industries other than agriculture. The income differences between farm laborers and laborers in all other types of industry are striking. Nearly 75 percent of the male farm laborers earned less than \$400 in cash during 1939, while only 37 percent of the nonagricultural male laborers earned as little as \$400. Only 1.5 percent of the male farm laborers earned as much as \$1,200 a year, compared with 15.1 percent of the other male laborers. In the case of females, the discrepancies are much greater. More than half of the female farm laborers earned less than \$100 during the year as compared with about 15 percent of the nonagricultural female laborers.

Several explanations should be made in interpretation of these comparisons. The first is that farm laborers often receive food, housing, fuel, etc. in addition to money wages. The estimate of the Bureau of Agricultural Economics of the money value of perquisites to hired farm laborers during the year 1939 amounted to 200 million dollars, or about one-fourth as much as the total cash wages of 782 million dollars. However, if an allowance for perquisites is estimated as one-fourth of the wage and salary income shown, the marked differentials in favor

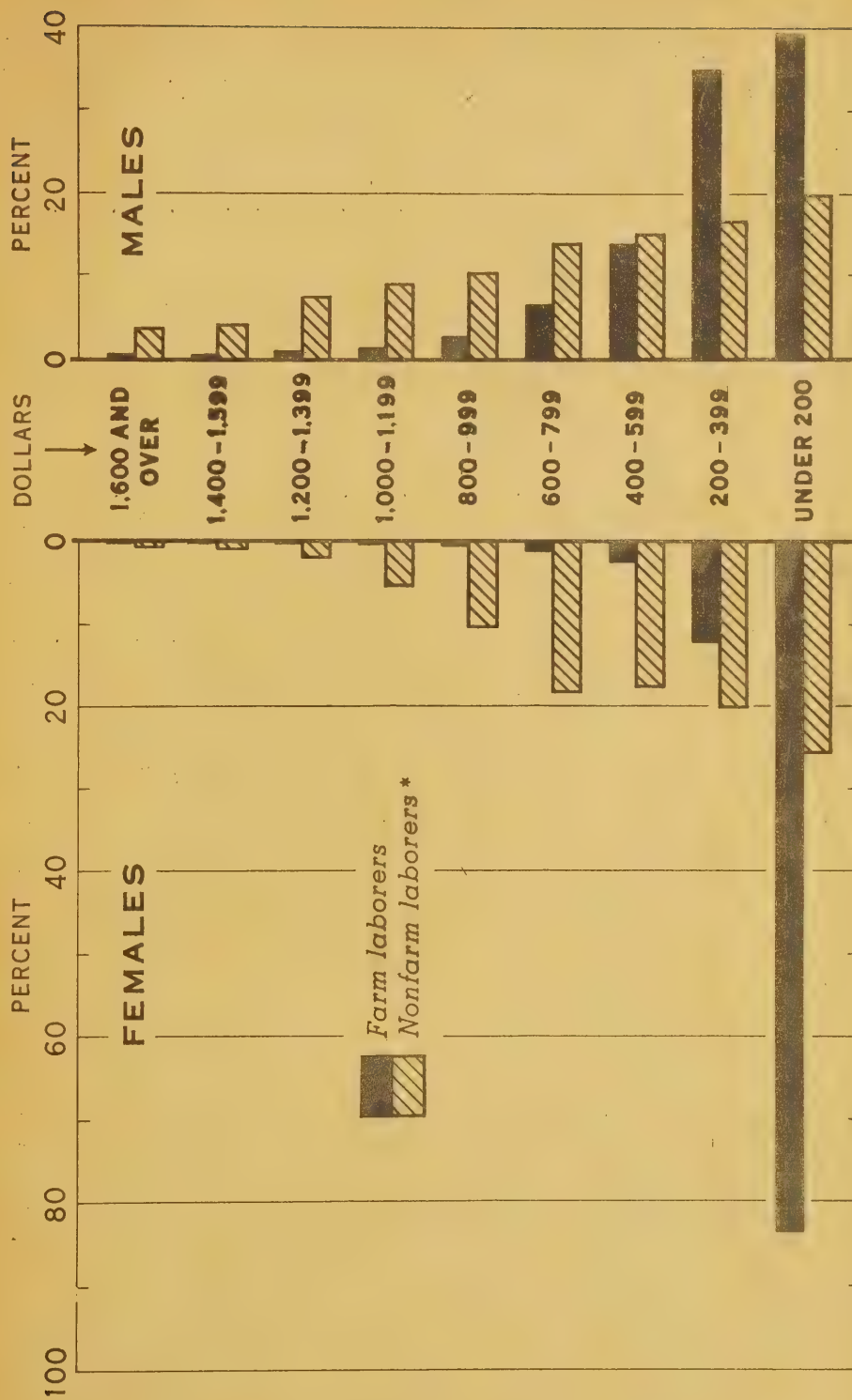
6/ Study of Family Spending and Saving in Wartime, conducted by the Bur. of Human Nutrition and Home Econ., Agr. Research Adm., in cooperation with the U. S. Bur. of Labor Stat. The special tabulations on farm laborers in this chapter were made by the Bur. Agr. Econ. from the original schedules.

7/ The number of farm laborers (wage workers) and farm foremen in the experience labor force (except persons employed at public emergency work) in the last week of March 1940 were as follows:

	<u>Total</u>	<u>Employed (except on emergency work)</u>	<u>Seeking work experienced</u>
Total	2,227,783	1,924,890	302,893
Male	2,112,901	1,828,164	284,737
Female	114,882	96,726	18,156

Census usage of the term "experienced labor force" includes all persons employed or seeking work except those who had never had a private or Government job of a nonemergency character, 1940 Census, Population, Vol. III, The Labor Force, Part 1, United States Summary, Table 59.

DISTRIBUTION OF FARM AND NONFARM LABORERS BY WAGE OR SALARY INCOME, UNITED STATES, 1939



DATA FROM 1940 POPULATION CENSUS

*EXCLUDING MINE LABORERS

Table 49.--Wage or salary income received in 1939 by all experienced laborers in the March 1940 labor force (except persons on emergency work), for farm laborers (wage workers) and other laborers, by sex, United States 1/

Wage or salary income class	Farm		Nonfarm 2/		Farm		Nonfarm 2/	
	:Percentage:		:Percentage:		:Percentage:		:Percentage:	
	:Male	:of those	:Male	:of those	:Male	:of those	:Female	:of those
:laborers: on income	:laborers: on income	:laborers: on income	:laborers: on income	:laborers: on income	:laborers: on income	:laborers: on income	:laborers: on income	:laborers: on income
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Total	2,112,901	3,794,250	114,882	116,013				
Not reporting on 1939 income	64,815	80,307	4,264	2,462				
Reporting on 1939 income	2,048,086	3,713,943	110,618	113,551	100.0	100.0		100.0
\$0 - 99	360,370	492,686	13.3	58,105	52.5	17,485	15.4	
100 - 199	447,512	245,639	6.6	34,454	31.2	11,520	10.1	
200 - 399	715,111	621,289	16.7	13,543	12.2	22,722	20.0	
400 - 599	282,838	556,897	15.0	2,527	2.3	20,016	17.6	
600 - 799	133,263	514,977	13.9	1,198	1.1	20,686	18.2	
800 - 999	52,683	388,400	10.4	459	0.4	11,672	10.3	
1,000 - 1,199	24,594	333,200	9.0	158	.1	5,970	5.3	
1,200 - 1,399	16,566	271,111	7.3	102	.09	2,092	1.8	
1,400 - 1,599	7,261	152,250	4.1	28	.03	747	0.7	
1,600 and over	7,888	137,494	3.7	44	.04	641	.6	

1/ 1940 Census, Population, Vol. III, The Labor Force, Part 1, United States Summary, Table 72.

Wage and salary income figures relate only to money income.

2/ Excluding mine laborers.

of the nonfarm laborers still remain. Thus, for example, by a 25-percent allowance for perquisites the median total income for male farm laborers would be raised to \$325, still only 56.1 percent of the male nonfarm laborers' median income.

The income comparison for farm and nonfarm laborers provided by these data probably understate somewhat the actual occupational differential. The group of persons classified as farm laborers in March 1940 received some of their 1939 earnings from nonfarm work, while the group classified as nonfarm laborers received some of their earnings from farm work, although in neither case is the amount known either for individuals or for the groups of individuals.

To whatever extent the 1939 income of the farm-laborer group includes earnings from nonfarm work and the 1939 income of the nonagricultural laborer group includes earnings from farm work, the data presented will tend to minimize the differentials actually existing in the earnings from each type of labor. In other words, the differential would be larger than it is if it were possible to subtract from the farm-laborer group the earnings from nonfarm work which were probably at a higher rate of pay than their farm work, and to do a corresponding subtraction of the earnings from farm work received by the nonagricultural laborer group.

Because the 1940 Census classified workers according to their status during the last week of March, a large, although unknown, number of seasonal farm laborers who worked in 1939 are not included in the farm-laborer group for which income information is available, and are not identifiable in other groups. On the basis of related Census data and comparisons of the estimated aggregate earnings of the farm laborers enumerated with the estimate of the total farm wage bill for 1939, it appears safe to assume that the farm laborers in table 49 comprise at least half of the total number of different persons working at farm work for wages in 1939. Moreover, they probably accounted for some fraction (approximately three-fourths) of the total time worked by all hired farm workers, since the excluded groups were mostly seasonal workers who averaged less time worked at farm labor during the year. Although it is difficult to appraise the effect of the partial coverage on the average level of annual earnings of farm laborers, there are reasons for believing the excluded groups probably had a lower average level of annual earnings than those laborers on which information is available.

Data on annual wage and salary income by occupation of persons in the experienced labor force in March 1940 are also available for the four major regions. From distributions similar to those of table 49 median wage and salary income of farm and nonfarm laborers by sex have been computed for each region and are shown in table 50. To provide some control on differences in income arising from differences in length of time worked, similar medians are also given in table 50 for farm and nonfarm laborers who worked 12 months in 1939 and these comparisons are shown for male laborers by regions in figure 19. Only in the Northeast did the median income for male farm laborers reach more than 50 percent of the median income for nonfarm laborers, and in the North Central region it was only 42.1 percent of the median for nonfarm laborers. For the 12-month workers, the median income of male farm laborers represented a lower percentage of the median income of nonfarm laborers than in the case of all laborers for every region.

Regional differences in median income of farm laborers and of nonfarm laborers are great. Half of the male farm laborers in the South who worked 12 months in 1939 received annual wages of less than \$262 while in the West half received more than \$646. For females the regional differentials are even

Table 50. -Median wage and salary income received in 1939 by all experienced laborers in the March 1940 labor force (except persons on emergency work), for farm laborers (wage workers) and other laborers, by sex, and for those employed 12 months in 1939, United States and major regions 1/

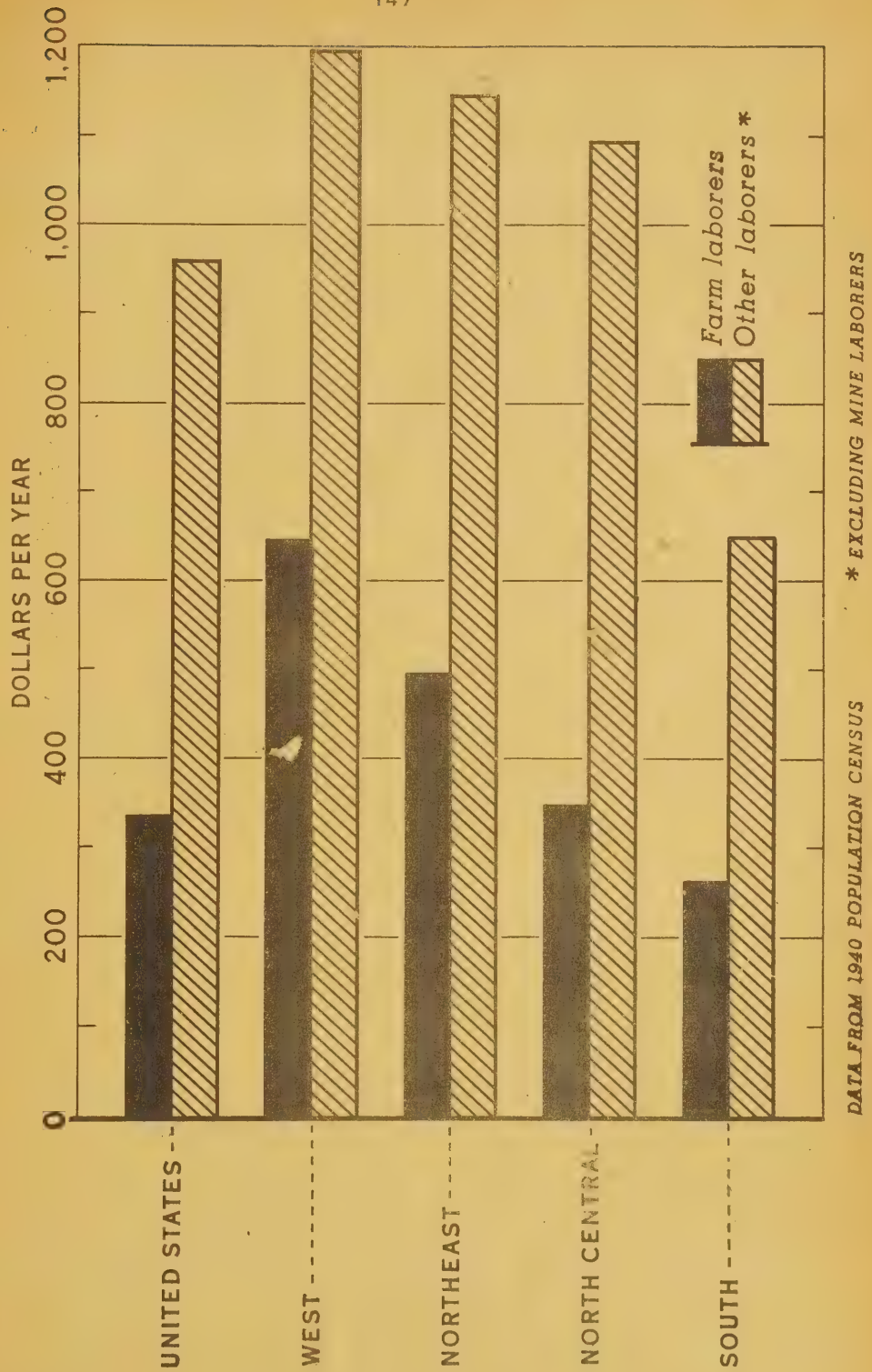
Region and sex of worker	For all laborers				For laborers working 12 months in 1939			
	: Median wage and salary income 2/		: Median income of farm laborers as percentage of median income of		: Median wage and salary income 2/		: Median income of farm laborers as percentage of median income of	
	: Farm laborers		: Nonfarm laborers		: Farm laborers		: Nonfarm laborers	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
United States								
Males	260	579	44.9		336	960	35.0	
Females	95	450	21.1		160	726	22.0	
Northeast								
Males	376	699	53.8		496	1,145	43.3	
Females	234	526	44.5		378	771	49.0	
North Central								
Males	286	679	42.1		348	1,093	31.8	
Females	161	539	29.9		266	778	34.2	
South								
Males	189	408	46.3		262	649	40.4	
Females	89	310	28.7		145	571	25.4	
West								
Males	406	740	54.9		646	1,196	54.0	
Females	104	408	45.1		494	829	59.6	

1/ 1940 Census, Population, Volume III, The Labor Force, Part 1, United States Summary, Table 72. Wage or salary income figures relate only to money income.

2/ Median income of those reporting on wage and salary income in 1939.

3/ Excluding mine laborers.

MEDIAN WAGE AND SALARY INCOME OF MALE FARM LABORERS AND OTHER MALE LABORERS WHO WORKED 12 MONTHS IN 1939, UNITED STATES AND MAJOR REGIONS



greater, the median earnings for the 12-month farm laborers in the South being only 29 percent of the corresponding median for the West. Thus among laborers, the lowest occupational group of workers, the spread of annual earnings is still wide, with marked differences between agriculture and industry, between the sexes, and among the major regions. The lower incomes for farm laborers of both sexes in the South, but especially for females, reflects race differentials as well.

These regional comparisons indicate that part of the differential in wage income between farm and nonfarm laborers for the country as a whole is due to the fact that a greater proportion of farm laborers than of nonfarm laborers are in the South, where wages are generally low. In the case of female farm laborers this is very important and explains why the percentage which female farm laborers' median wage income comprises of that for nonfarm female laborers is lower for the United States as a whole than in any major region.

The income information in table 50 for those laborers who had worked 12 months during 1939 indicate that the length of time worked does not vitiate the income comparisons made earlier. For the United States as a whole the median income for male farm laborers who worked 12 months in 1939 is only 35 percent of that for nonfarm male laborers who worked 12 months, as compared with 45 percent for all laborers, regardless of time worked. The same relationship holds for male laborers in each major region, that is, the median income of 12-month farm laborers does not comprise so great a percentage of the median income of 12-month nonfarm laborers as in the case of all farm and all nonfarm laborers. For female laborers in the United States as a whole, the percentage the median income for 12-month farm laborers comprises of that for nonfarm laborers is 22, almost identical with the corresponding percentage for all female laborers, 21 percent. In the several major regions, the corresponding percentages are higher for 12-month than for all female laborers except in the South, but they are not enough higher to indicate that the time factor introduces any serious distortion in the comparisons made for all female laborers.

The relatively low level of annual earnings of farm laborers is even more apparent if comparisons are not restricted to just the laborer group in non-agricultural occupations, who are mostly in the common or unskilled labor category. Table 51 gives comparisons of median income for all wage and salary workers employed in agriculture and for all wage and salary workers employed in nonagricultural industries. The agricultural workers for whom the medians are shown are mainly the farm laborers of table 50. 8/ The medians indicate that agriculture as an industry in 1939 paid its wage and salary workers a median money income only about 30 percent as great as that paid by nonagricultural industries. This relationship holds fairly constant for males and females and for 12-month workers as well as for all workers.

8/ The agricultural workers for whom medians are shown in table 51 differ from those in table 50 only by inclusion of farm managers and other wage and salary workers in agriculture and exclusion of persons reporting \$0 income in 1939. This has the effect of raising the median income from \$260 to \$288.

Table 51.-Median wage and salary income received in 1939 by all experienced agricultural and nonagricultural wage and salary workers in the March 1940 labor force (except persons on emergency work) by sex, for all workers and for those employed 12 months in 1939 1/

Type of worker	:Median wage and salary income:Median income of agri-		:cultural workers as per-
	:Agricultural workers 2/:	:Non-agricultural workers 2/:	
	Dollars	Dollars	Percent
All workers 2/	288	931	30.9
Male	298	1,001	29.8
Female	125	418	29.9
Workers employed for 12 months in 1939 3/	376	1,239	30.3
Male	378	1,407	26.9
Female	258	709	32.7

1/ 1940 Census, Population, The Labor Force (Sample Statistics), Wage or Salary Income in 1939, Tables 8, 9. Data relate to all experienced persons in the labor force (except those on emergency work) in March 1940. Wage or salary income figures relate only to money income.

2/ In addition to hired farm laborers, this group includes farm managers and approximately 130,000 other wage and salary workers classified by the Census as in agriculture.

3/ Excluding from the 2,375,980 agricultural wage and salary workers 75,220 who did not report on income and 190,260 who reported no income; excluding from the 35,946,440 nonagricultural wage and salary workers, 811,460 who did not report on income and 2,483,180 who reported no incomes.

Family Income, 1939

The Census material on 1939 income from wages and salaries has also been compiled in such a way as to afford comparisons for families by occupation of head of household in March 1940. 9/ In table 52 and figure 20 data are found on family income from wages and salaries with distributions for certain occupational-residence groups. Information on families with a farm laborer as head of household is available only for rural-farm resident families. The occupational classification of heads of nonfarm-resident households does not show farm and nonfarm laborers separately, and the families include only those in which all workers were wage or salary workers.

In terms of family income, only domestic servants fare so badly as farm laborers, and in their case the value of food and housing received as pay is probably greater than for farm laborers. The median money income from wages and salaries of farm-laborer families is only 43.5 percent of that for laborer families who do not live on farms, and only 22.9 percent of that for nonfarm families who do not have a domestic servant or a farm laborer as head of the household and who have only wage or salary workers in the family. Again the regional and race differentials are striking within the farm-laborer group. More than 40 percent of the nonwhite farm-laborer families in the South had family wage and salary incomes of less than \$200, while only 4.3 percent of farm-laborer families of the Northeast and only 6.0 percent in the West had family incomes this low.

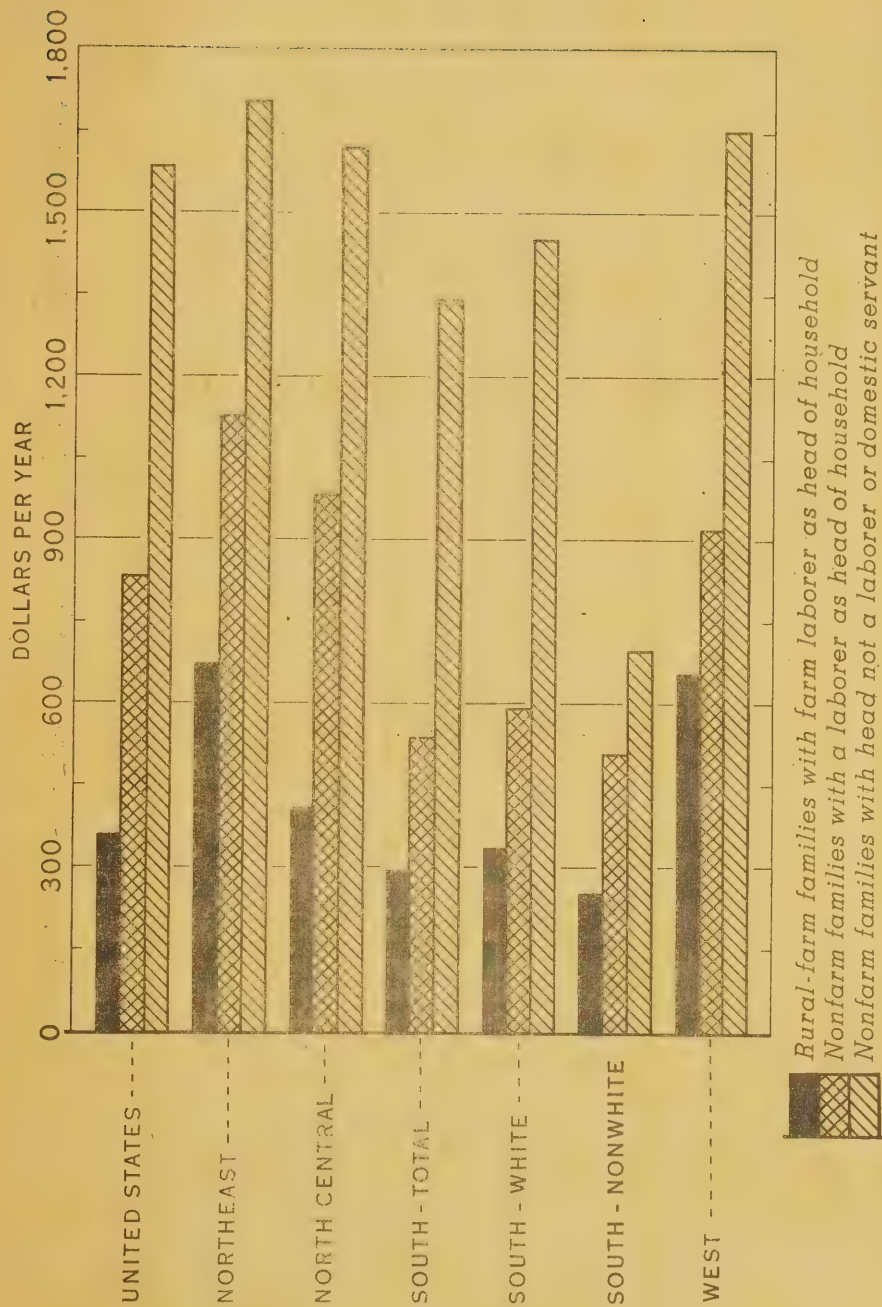
Only in the Northeast and the West did as many as about 20 percent of the farm-laborer families have a wage and salary income as large as \$1,000. Even if a value of perquisites estimated at one-fourth of the income from wages and salaries be added to the medians shown, the resulting figures would indicate that in no region was the median family income of farm laborers sufficient to provide what would generally be considered an adequate level of living.

Housing Facilities of Farm-Laborer and Farm-Operator Families, 1939

Comparisons made on the basis of wage and salary income are not appropriate for comparing income of farm operators with income of other groups, since the income earned from operating the farm is excluded. Therefore, the Census information does not lend itself to comparisons of the two main

9/ The figures for family income do not represent solely earnings from the occupation indicated except in those cases where the head of the household was in the same occupation for the entire year 1939 as he was in March 1940, and was the only wage or salary earner of the family during 1939, or in cases where all earnings from other family members came from the same occupation as that of the head of household.

MEDIAN WAGE OR SALARY INCOME FOR FAMILIES OF WAGE AND SALARY WORKERS BY OCCUPATION OF HEAD OF HOUSEHOLD, UNITED STATES AND MAJOR REGIONS, 1939



DATA FROM 1940 POPULATION CENSUS

FIGURE 20

Table 52.-Comparisons of wage and salary family income of rural-farm families with farm laborer as head of household and of nonfarm-resident families, for the United States and major regions, 1939 1/

Area and race in South	Rural-farm families:										Nonfarm-resident families									
	: with farm laborer as:					: With a laborer as					: With a domestic servant:					All other (head other than				
	: head of household					: head of household 2/:					: as head of household					: laborer or domestic servant)				
	: Median: Percentage of:					: Median: Percentage of:					: Median: Percentage of:					: Median: Percentage of:				
	: family: families with:					: family: families with:					: family: families with:					: family: families with:				
	: wage &: family income:					: wage &: family income:					: wage &: family income:					: wage &: family income:				
	: salary: less than:					: salary: less than:					: salary: less than:					: salary: less than:				
	: income:					: income:					: income:					: income:				
	: 3/ : \$200 : \$1,000 :					: 3/ : \$200 : \$1,000 :					: 3/ : \$200 : \$1,000 :					: 3/ : \$200 : \$1,000 :				
	Dol.	Pct.	Pct.	Dol.	Pct.	Dol.	Pct.	Pct.	Dol.	Pct.	Dol.	Pct.	Pct.	Dol.	Pct.	Dol.	Pct.	Pct.	Pct.	Pct.
United States	363	23.8	93.4	834	6.7	59.2	339	29.9	88.7	1,586	1.4	23.0								
Northeast	674	4.3	79.9	1,129	3.0	42.2	579	13.2	74.2	1,704	1.0	18.7								
North Central	408	11.0	94.1	985	4.8	50.9	385	26.7	83.9	1,618	1.1	20.5								
South - total	295	33.5	97.3	541	11.9	82.6	280	37.1	94.9	1,342	2.2	34.5								
White	337	25.1	95.4	593	11.4	77.0	286	36.7	93.2	1,453	1.7	29.0								
Nonwhite	254	41.1	98.8	507	12.4	87.7	279	36.7	95.1	697	5.7	76.1								
West	655	6.0	81.6	922	5.5	54.8	460	22.7	83.6	1,650	1.4	20.7								

1/ 1940 Census, Population, Families, Characteristics of Rural-Farm Families, Table 8; Family Wage or Salary Income in 1939, Table 7, Nonfarm families include urban-farm families. Wage and salary income figures relate only to money income.

2/ Including urban and rural-nonfarm families with a farm laborer as head of household.

3/ Median of families reporting some wage and salary income in 1939.

occupational groups within agriculture--operators and members of their families as against hired farm workers. However, material on housing and facilities is available for rural-farm families with a classification by occupation of head of household in March 1940. The 4,487,120 rural-farm households in which the head was classified as a farmer or farm manager during March 24-30, 1940 represent the farm-operator families, and the 567,940 in which the head was classified as a farm laborer or farm foreman represent the farm-laborer families.

Comparisons for these two groups of families with respect to several housing items are shown in table 53. Almost without exception in every region the homes of farm operators are better and are better equipped than the homes of the farm laborers. On most of the items the occupational differentials are not great, however, and they are overshadowed by race and regional differentials. It must be remembered that these occupational comparisons are not clear-cut employer-employee comparisons. The farm operator families include many more of the 2.4 million tenants and croppers than of the 0.9 million operators who were hirers of farm laborers in March 24-30, and possibly even more of the small owner-operators who did not hire. Undoubtedly, similar comparisons of housing of farm laborers with that of their employers as a group would show much more marked contrasts.

Earnings of Farm Laborers in 1941

By the year 1941, farm wage rates had increased 25 percent over their 1939 level. Relative to conditions prevailing throughout the 1930-40 decade, the year 1941 was by no means a year of low farm income or low farm wage rates. The impact of war had already substantially reduced unemployment and had raised the general level of wages, prices, and income among all groups of the economy. Farm wage rates were already 81 percent above their depression low in 1933 and 31 percent above their 1935-39 average. Furthermore, when allowance is made for changes in the price level of goods used by farmers in family living the adjusted index of farm wage rates was higher in 1941 than in the previous peak years of 1920 and 1929. Although it cannot be predicted what farm-wage conditions may obtain in the years following the conclusion of the war, it is not likely that wages will remain at the peak war level. Hence information on the 1941 situation may afford some basis for post-war thinking.

Special tabulations from the Study of Family Spending and Saving in Wartime have been made for a national sample of 223 farm laborers. ^{10/} This

^{10/} The tabulations presented on farm laborers involve all farm laborers included in the group designated as "rural-nonfarm" families in Rural Family Spending and Saving in Wartime, U. S. Dept. Agr. Misc. Pub. No. 520, June 1943. The "rural-nonfarm" group on a residence basis excludes the "urban" group of families (families living in incorporated places of 2,500 or more population), and on an occupational basis excludes families receiving any entrepreneurial income from operating a farm during 1941 (designated as "rural-farm" families in the cited publication.) As of April 1940, urban residents comprised only 7 percent of all farm laborers in the United States.

Table 53.-Housing facilities of rural-farm families with farm laborer as head of household and with farm operator (farmer or farm manager) as head of household, United States and major regions, 1940 1/

Item and occupation of head of household 2/	: United :			: North :			: South :		
	: States :			: Northeast:Central:			: Total: White: Nonwhite 3/:		
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Percentage of owned homes with value more than \$500									
Farm laborer	54.0	88.4	67.9	39.7	44.2	32.6	51.1		
Farmer or farm manager	75.3	96.2	87.8	58.4	62.4	33.4	73.4		
Percentage of tenant homes with monthly rental of more than \$5									
Farm laborer	43.3	91.2	75.1	23.9	35.5	13.8	79.4		
Farmer or farm manager	54.2	96.0	85.4	35.1	45.4	19.0	87.7		
Percentage of homes with toilet or privy									
Farm laborer	88.6	98.5	96.4	83.8	88.0	79.9	95.6		
Farmer or farm manager	91.8	98.6	97.4	86.3	88.6	79.9	96.0		
Percentage of homes with running water									
Farm laborer	13.5	42.4	10.9	5.0	9.0	1.2	44.2		
Farmer or farm manager	16.9	48.8	18.0	7.6	10.1	0.5	49.5		
Percentage of homes not needing major repairs									
Farm laborer	63.2	73.2	66.6	59.1	59.6	58.6	73.6		
Farmer or farm manager	67.7	76.3	72.6	62.2	64.6	55.8	74.2		
Percentage of homes reporting 1.00 or fewer persons per room									
Farm laborer	59.1	86.2	76.8	51.3	49.7	52.8	58.7		
Farmer or farm manager	70.8	93.1	85.7	57.2	64.4	42.7	73.3		
Percentage of homes reporting electricity									
Farm laborer	22.6	66.8	32.8	7.7	12.4	3.4	58.7		
Farmer or farm manager	29.8	66.2	39.2	14.7	19.2	2.2	57.2		

1/ 1940 Census, Population and Housing, Families, Characteristics of Rural-Farm Families, Tables 2,10,11, and 13.
 2/ Major occupation during week of March 24-30, 1940.

3/ The inclusion of sharecroppers in the "farmer or farm manager" classification is largely responsible for the reversal among nonwhites in the South of some of the differentials in housing facilities prevailing in all other regions between farm laborers and farmers of farm managers.

sample does not represent all types of farm laborers working for wages, as it excludes those who are urban residents and those who are farm operators or members of a farm operator's family. The interpretation of this material must be qualified in the light of the fact that although the sample is representative of the most important segment of all farm laborers, it does not represent the entire group of farm laborers in the United States. However, the results presented are consistent with independent national estimates relating to farm wage rates and farm employment for 1941. Moreover, the figures on individual laborer and family income for 1941 appear to be in reasonable agreement with the results of the more comparable studies for past years, when allowances are made for the changed wage levels and employment opportunities.

The average amount of cash earnings per worker from farm labor during 1941 was \$287 for the group studied and the average number of weeks worked in farm labor was 31, or 60 percent of the total weeks in the year 11/ (table 54). An earnings figure very close to this is obtained from the average farm wage rate of \$38.14 per month reported by the Bureau of Agricultural Economics for 1941, and the time reported worked by the laborers in the sample. At a monthly wage rate of \$38.14 the annual earnings for the laborer working 12 months would be \$458, but only \$275 for the laborer working only approximately 30 weeks. For the farm laborers in the sample who reported amount of time worked and earnings from farm labor the average cash farm wages during 1941 was \$9.65 per week worked. When allowance is made for the value of perquisites received by these farm laborers 12/, the average total wage rate for this group was \$10.83 per week actually worked. A comparable figure derived from the Bureau of Agricultural Economics estimates of the total farm wage bill and the annual average number of hired workers employed is \$9.10 per week. 13/

If the average number of weeks worked in farm labor during 1941 by the sample of laborers studied is used as an estimate of the average time worked by all farm laborers, the annual average number of 2,532,000 hired workers estimated in the BAE series on farm employment actually represents 4,247,000 different individuals who worked at some time during the year as hired farm laborers. This estimate is consistent with a similar estimate for the year 1943 made on the basis of a Nation-wide enumerative survey. 14/ Because of the

11/ Time worked in farm labor was reported in "weeks" without indication of the length of the work-week.

12/ Allowance for perquisites derived from data on perquisites received by families of farm laborers related to number of farm workers and time worked.

13/ The total farm wage bill (including perquisites) of \$1,197 million divided by the annual average number of hired workers, 2,532,000, provides an estimate of \$470 as the wages for 12 months of farm labor, or \$9.10 when expressed as the wage cost per man-week. The higher average wage income of \$10.83 may be due to the bias introduced through failure of more of the lower paid farm laborers to report both time and earnings or to exclusion from sample of farm laborers who live in cities or in farm operators' households.

14/ See Chapter 2, p. 18.

Table 54.-Average length of time worked, average yearly earnings and average weekly wage rates of 223 farm laborers by sex, 1941 1/

Item	Unit	Total	Males	Females
Farm laborers studied	Number	223	178	45
Percentage who are heads of households	Percent	52	62	11
Mean age	Years	32	35	27
Average number of weeks employed in farm labor during 1941 <u>2/</u>	Weeks	31	35	13
Average amount of money earnings from farm labor during 1941 <u>3/</u>	Dollars	287	341	64
Average amount of cash farm wages per week worked during 1941 <u>4/</u>	Dollars	9.65	9.97	5.57

1/ From special tabulations made by the Bur. Agr. Econ. of data from the Study of Family Spending and Saving in Wartime, through cooperation of the Family Econ. Div. of the Bur. of Human Nutrition and Home Econ., U. S. Dept. Agr.

2/ Based on information from number reporting weeks worked at farm labor in 1941 as follows: Total, 191; male, 156; female, 35.

3/ Based on information from number reporting amount of earnings from farm labor in 1941: Total, 212; male, 171; female, 41.

4/ Based on information from number reporting both weeks worked and amount of earnings in 1941: Total, 188; male, 154; female, 34.

average the hired farm laborer was employed in farm work only about 60 percent of the year, the number of different workers (exclusive of dependents) affected by farm wage rates and by other factors that determine the welfare of farm laborers is very much larger than any average number such as reported in current employment figures.

Both in proportion of the year worked and in rates of pay, there were marked differences between male and female farm laborers in 1941. The females covered by the survey worked on the average only a little more than one-third as long as males and during the weeks actually worked they received only slightly more than half as much pay. ^{15/} Thus the annual cash earnings from farm work for female farm laborers was only \$64 compared with an average of \$341 for males. The females were younger on the average than males, their mean age being 26.7 years compared with 35.0 years for males. They were less frequently heads of households; in only 11 percent of the cases were they heads as compared with 62 percent of the male farm laborers.

When the farm laborers are grouped according to the net annual money income class or their families in 1941, differences in age, weeks worked, earnings, and wage rates are evident among the several income classes. Male farm laborers in families where the net money income was less than \$500 in 1941 were generally somewhat older, more often the head of a household, employed for a greater proportion of the year but at a much lower wage rate than were male farm laborers in the higher family income groups. Among women the same differences generally held except with respect to age--the younger female farm laborers were found in the groups of the lowest family incomes.

The implications of the amount of annual earnings for the level of living of workers and their dependents are made clearer when information is presented on a family rather than on an individual-laborer basis. A distribution is shown in table 55 of the 134 families which included the 223 farm laborers by net money income of the family in 1941, along with the average value of family living. For comparison, similar information is shown for the farm-operator families covered in the same survey.

Of the farm-laborer families surveyed, 81 percent had annual net money incomes during 1941 of less than \$1,000, as compared with 59 percent of the operator families. This comparison understates the relative position of the laborer families, for they had less than half as great an average nonmoney income as did the families of farm operators. Partly as a result, the average value of family living of operator families, which includes both expenditures for family living and the value of items obtained without direct money outlay, exceeded that of farm-laborer families by an average of \$434, or 48 percent.

^{15/} Their lower weekly wage is probably due partly, but not wholly, to a shorter work-week. The average length of work-week for all females working on farms in 1943 was 44 hours as compared with 59 hours for males. The Farm Working Force of 1943, Bur. Agr. Econ., March 1944.

Table 55.-Distribution of 134 farm-laborer families and 762 farm-operator families by net money income class in 1941, with average total, money, and nonmoney income, and average value of family living 1/

Annual net money income class	Farm-laborer families				Farm-operator families			
	Number	Percent	Percent- age of families	Average value per family	Number	Percent	Average value per family	Value of
				Total : Money : income			Total : Money : income	Mon- : Value of
				: Dollars : Dollars			: Dollars : Dollars	ney : family
	Number	Percent		Dollars	Number	Percent	Dollars	ney : family
All classes	134	100.0		239	762	100.0	1,655	1,344
\$0 - 499	55	41.0		291	257	33.7	688	271
500 - 999	53	39.6		723	193	25.3	1,269	737
1,000 - 1,499	17	12.7		1,189	110	14.4	1,782	1,250
1,500 - 1,999	9	6.7		1,771	81	10.6	2,306	1,477
2,000 - 2,999	---	---		---	65	8.5	3,064	1,806
3,000 - 4,999	---	---		---	28	3.7	4,491	2,203
								2,551

1/ Information on farm-laborer families from special tabulations made by the Bur. Agr. Econ. of data from the Study of Family Spending and Saving in Wartime, through cooperation of the Family Econ. Div. of the Bur. of Human Nutrition and Home Econ. Information on farm operator families adapted from Rural Family Spending and Saving in Wartime, U. S. Dept. Agr., Misc. Pub. No. 520, June 1943.

2/ Value of family living is the sum of actual expenditures for family living plus the value of items obtained without direct money outlay, such as food produced for family use, value of occupancy of owned homes, and value of fuel, perquisites, etc.

3/ Total includes a few families with negative income and incomes of more than \$5,000.

In the case of farm-laborer families, the average value of family living almost exactly equaled the average total income in each income class, whereas in operator families the total income exceeded the value of family living by an average of \$311 per family. Although the families of operators in the sample achieved an average net saving of \$294 during the year, ^{16/} living expenditures absorbed practically all the money income of farm-laborer families. Nearly one-fourth of all these families sampled received relief in some form during 1941, but only about half as great a proportion of the operator families did so.

Differences in the source of nonmoney income are striking. Farm laborers' families produced hardly more than one-third of the quantity of food for home use which was produced on the average by operators' families. Even when the value of food received as pay is combined with the value of home-produced food, the average annual value per laborer family of food consumed although not purchased was only \$142 as compared with \$335 per operator family. Farm-laborer families also averaged a substantially smaller nonmoney income in the form of housing owned or received as pay than operator families. Since nonmoney income of farm-laborer families represented a smaller proportion of the total value of family living than in the case of operator families, cash expenditures had to take care of a larger part of the cost of living of laborer families. Thus money expenditures had to provide for 74 percent of the total value of family living for laborer families, as contrasted with only 61 percent in the case of operator families.

The differences in percentages of farm-laborer and operator families which reported various items used in family living are generally in line with the average income differences, although the difference between the percentages reporting expenditures for reading--80 percent of the farm-operator families as compared with 56 percent of the farm-laborer families--is probably higher than would be expected solely on the basis of higher mean income. Expenditures for automobile transportation were reported by 69 percent of the operator families but by only 51 percent of the laborer families. Somewhat higher percentages of operator families than of laborer families reported expenditures for such items as medical care, recreation, formal education, and miscellaneous family expenses.

In general, the patterns of consumption for the farm-operator and farm-laborer families are similar, as indicated by the percentage distribution of the value of family living among the major categories (table 56). Food comprised only a slightly higher percentage of the total value of family living for laborers, 45.5 percent as compared with 43.8 percent. However, cash expenditures for food were 39.0 percent of all expenditures for family living in the laborer families but only 30.4 percent in the operator families, even though the mean size of family was practically the same in both groups. This is more in line with the differences in proportion of expenditures going for food generally observed between groups of different average-income levels.

^{16/} The difference of \$17 between \$311 and \$294 is accounted for by the excess of expenditures for gifts and welfare over the value of inheritances and gifts received.

Table 56.-Comparisons of value of family living by major categories, farm-laborer families and farm-operator families, 1941 ^{1/}

Item	Farm-laborer families		Farm-operator families	
	Average	Percentage	Average	Percentage
	value per	of total	value per	of total
	family	value	family	value
	<u>Dollars</u>	<u>Percent</u>	<u>Dollars</u>	<u>Percent</u>
Total value of family living	910	100.0	1,344	100.0
Food	414	45.5	589	43.8
Housing	96	10.5	147	10.9
Fuel, light, etc.	49	5.4	^{2/} 85	6.3
Other household operations	18	2.0	34	2.5
Furnishing and equipment	39	4.3	72	5.4
Clothing	99	10.9	153	11.4
Automobile	75	8.2	103	7.7
Other transportation	10	1.1	6	0.4
Personal care	14	1.5	20	1.5
Medical care	35	3.8	60	4.5
Recreation	18	2.0	26	1.9
Tobacco	18	2.0	17	1.3
Reading	5	0.6	7	.5
Formal education	6	.7	8	.6
Miscellaneous family expense	14	1.5	17	1.3

^{1/} Information on farm-laborer families from special tabulations made by the Bur. Agr. Econ. of data from the Study of Family Spending and Saving in Wartime, through cooperation of the Family Econ. Div. of the Bur. of Human Nutrition and Home Econ. Information on farm-operator families adapted from Rural Family Spending and Saving in Wartime, U. S. Dept. Agr., Misc. Pub. No. 520, June 1943.

^{2/} All nonmoney value of household operation assumed to be fuel, light, and refrigeration.

Thus it is higher value of home-produced food which brings the total value of food for operator families up to a percentage of total value of family living nearly equal to that for the laborer families. The average value of the specified items consumed is higher for operator families than for laborer families except for the minor items of tobacco and transportation other than by own automobile.

Accurate information was not available on the earnings the individual farm laborers had during 1941 from specified types of employment other than farm labor. For their families, however, the sources of the total family money income for the year 1941 are shown in table 57. For the entire group, more than two-thirds of all money income was received as earnings from farm labor of one or more members of the family, only 3 percent from relief, and nearly 30 percent from other sources, mainly from nonfarm work. The proportion of total money income received as wages for farm work comprised 72 percent in the lowest income class, but only 61 percent in the class with incomes from \$1,500 to \$2,000.

The percentages of farm-laborer families receiving various types of nonmoney income and the average value received of each type are shown in table 58. Nearly 70 percent of the families produced some food for home use, with an average for all families of \$114 worth during the year. About 40 percent of the families received housing in addition to cash wages, and about 22 percent received food as part of their pay. For those who received these perquisites the average value of housing received was \$83 and of food received as pay was \$127. But the total value of perquisites averaged only \$61 a year for all farm-laborer families surveyed.

Selected information on race, residence, size, number of workers, etc. of the families of farm laborers sampled is given for each income class in table 59. Although 70 percent of the families produced food for home use during the year, only 52 percent of them actually lived on farms. Nearly 19 percent of the families were nonwhite, and these tended to be concentrated in the lower income classes. Nearly one-fourth of the families had received some relief during 1941, either direct or work relief, although the average amount received was very small.

The positive correlation of family size with income is striking. The highest income group had a mean family size of 6.67 family members and an average of 2.89 farm laborers, as contrasted with the lowest income group with an average of 2.75 family members and 1.20 farm laborers. The dependence of the level of family income on the number of potential workers in the family and on the availability of jobs is obvious.

For the group of 134 farm laborer families sampled in this survey, the average money income of \$675 during 1941 had to support four persons. More than two-thirds of the money income was received as earnings from farm labor, with an average of 1.66 farm laborers per family working an average of 31.3 weeks each. Although no balancing of net changes in assets during the year was made for the farm-laborer families, the fact that the average value of family

Table 57.-Distribution of money income of 134 farm laborer families by source, 1941, by money income class 1/

Annual net money income class	: Money income :									
	: Total money income:					: Money income :				
	: from farm labor :					: from relief :				
	: Average:Percentage:					: Average:Percentage:				
	: per :	: of total :	: per :	: of total :	: per :	: of total :	: per :	: of total :	: per :	: of total :
: family :	: income :	: family :	: income :	: family :	: income :	: family :	: income :	: family :	: income :	
Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	
All classes	675	100.0	453	67.1	21	3.1	201	29.8		
0 - 499	291	100.0	209	71.8	10	3.4	72	24.8		
500 - 999	723	100.0	505	69.8	22	3.0	197	27.2		
1,000 - 1,499	1,189	100.0	753	63.3	23	1.9	413	34.8		
1,500 - 1,999	1,771	100.0	1,073	60.6	83	4.7	615	34.7		

Table 58.-Average value of nonmoney income of 134 farm-laborer families by type of income, 1941 ^{1/}

Type of nonmoney income	Percentage of families reporting specified types	Average value	
		For all families	For families reporting
	Percent	Dollars	Dollars
All types	98.5	239	242
Food received as pay	21.6	28	127
Housing received as pay	39.6	33	83
Food produced for home use	69.4	114	164
Relief income in kind	14.9	5	34
Other	---	59	64

^{1/} From special tabulations made by the Bur. Agr. Econ. of data from the Study of Family Spending and Saving in Wartime, through cooperation of the Family Econ. Div. of the Bur. of Human Nutrition and Home Econ.

Table 59.-Selected information on 134 farm-laborer families, by net money income class in 1941 1/

living falls short of the average total net income by only \$4 shows that practically no savings were made on the average by these families during 1941.

One of the more informative aspects of this study is its indication of the change in economic circumstances of farm laborers accompanying the very substantial improvement by 1941 in general economic conditions. The significance lies in the portent for the economic improvement of farm laborers that a progressively higher level of national income and employment could achieve.

This is suggested by a comparison of the average earnings of farm laborer families as shown in this study for 1941, with the average for the 1935-36 study made in 11 counties representing the principal type-of-farming areas of the country. ^{17/} This study showed an average money income for farm-laborer families of about \$268, as compared with \$675 in the 1941 study. Annual earnings per family from agricultural work shown in these two studies were \$227 in 1935-36 and \$453 in 1941. Earnings from nonagricultural work averaged only \$35 in the earlier study and were in the neighborhood of \$200 in 1941.

The increase of 43 percent in the agricultural wage level between 1935-36 and 1941, together with a similar increase in weekly earnings of workers in manufacturing industries, can account for a substantial part of the changes noted in the average family income of the groups studied. Yet the major part of the increase is probably due to the fuller employment of heads of the household and the employment of more members of the family for longer periods. For example, the 1935-36 studies showed that only about 23 percent of the families had more than one worker contributing to the family income, while the 1941 study showed 32 percent of the families with two or more workers in agriculture alone. The proportion of families with two or more workers in all occupations would probably be considerably higher.

The marked correlation noticed in the 1941 study between the size of family and number of workers was probably not present to the same extent under conditions prevailing in 1935 when there were in the country some 10 million or more unemployed. The need of maximizing family earnings makes the economic welfare of farm-laborer families especially sensitive to employment conditions which restrict or increase the extent to which family members can have gainful work.

A second important implication of the data is that even in as favorable a year as 1941, farm-laborer families generally had a substandard income level, as did a large proportion of the farm-operator families. The average total income (money plus nonmoney) of farm-laborer families of \$914 was still deficient for providing a budget at a "health and decency" level for a

^{17/} Tom Vasey and Josiah C. Folsom, Survey of Agricultural Labor Conditions (for each of 11 counties) Farm Sec. Adm. and Bur. Agr. Econ., 1937. Although the methods employed in these studies differed somewhat from those of the 1941 study, the money income results are roughly comparable.

four-person family under the prevailing price conditions. 18/

Living costs increased in 1942 and 1943, but income and wages of workers in agriculture and industry increased more, so that by 1943 substantial gains over 1941 in the family-income level of farm laborers and other groups had occurred. An indication of the trend in the average weekly earnings of farm laborers from farm work for the period of their employment is provided by the following estimates derived from other data of the Bureau of Agricultural Economics. The average wage cost per man-week of hired labor (including the value of perquisites furnished) increased from \$9.10 in 1941 to \$11.85 in 1942 and to approximately \$15.40 in 1943. The increase of 69 percent by 1943 over 1941, when adjusted for changes in living costs, represented a gain of 30 percent in the purchasing power of the weekly income. By 1943 there probably also occurred some further increase in the number of weeks worked per year.

Despite these improvements, it is probable that a large proportion of farm-laborer families in 1943 still lived and worked under conditions which cannot be considered as adequate. For farm laborers, as well as for other segments of farm and nonfarm population which continue in the low income categories, the problems of maintaining and extending under peacetime conditions the gains brought about by the war will present a major challenge.

18/ A minimum "health and decency" budget based on the studies of the Heller Committee for Research in Social Economics was estimated by the State Relief Administration of California as requiring \$972 for a dependent family of 4.5 persons (State Relief Adm. of California, Migratory Labor in California, 1936). This budget estimate is based on 1935 prices and, if allowance is made for changes in rural cost of living since 1935, the above budget estimate would be raised to \$1,027 in 1941 and \$1,333 in 1943.

WARTIME REGULATION OF FARM WAGE RATES

Unprecedented demands for manpower by war industries and by the armed forces together with expansion of agricultural production have necessitated numerous adjustments in the wage and working conditions of hired farm laborers. Mobilization of the Nation's resources for total war have set in motion a variety of manpower controls generally and special measures in agriculture directed toward stabilizing or maintaining the supply of farm labor.

These measures included deferment of agricultural workers from military service, controls on job shifts from agriculture to other industries by the War Manpower Commission, importation of farm workers from Mexico, Jamaica, and other countries in the Western hemisphere under international agreements, transportation of domestic farm labor from surplus to shortage areas, the use of war prisoners and the detailing in emergency situations of some units of the armed forces for farm work. In the absence of such measures, particularly the deferment of farm workers, the situation in regard to the farm labor supply would have been more difficult and its effect on farm wage rates more pronounced.

Farmers in general have responded to the combination of high farm income and high wages in competitive nonagricultural employment by increasing wage rates, granting more in the nature of housing and other perquisites, and making other attempts to retain and attract laborers from the available supply. The upward movement of farm wage rates has been substantially influential in the successful achievement of war food goals by the Nation's farmers.

However, in some areas that are adjacent to war industry centers or are dependent upon nonlocal sources of labor for seasonal operations, the competitive demands for labor have necessitated special measures to minimize the ill effects of unrestricted wage competition among farmers on farm production and in some cases on the processing of certain foods.

Government intervention in agricultural wage matters through 1943 has been kept to a minimum, but regulations for controlling farm wages were instituted and specific wage ceilings were set in designated areas for a number of crops in California and for citrus fruits in Florida. In the early part of 1944, wage ceilings were set for several additional crops in California and there is the prospect of extending the program of stabilizing farm wage rates to other crops or areas.

Compliance with the agreements negotiated with the countries from which workers have been imported has also required official determination of "prevailing wage rates" for particular crops and areas in which foreign labor and other special groups of workers were employed.

What form wartime regulation of farm wage rates should take, in what areas and crops such controls should be applied, and what factors need to be considered in setting wage rates, present many problems. The magnitude of

some of the problems has been indicated indirectly in the preceding chapters on the differences among areas in level of wage rates and in employment practices, the relationship between agricultural and nonagricultural wage rates, the factors making for changes in wage rates, and the differentials found among sectors of the agricultural economy with respect to conditions of the labor supply and ability to pay wages. All of these have a direct bearing on the need for any wage regulation or the type of regulatory action required. In this chapter developments in wartime regulation of farm wages are reviewed in the light of experience to date with stabilization of farm wages.

Stabilization of Farm Wages

The outbreak of the war in Europe and the resulting upward movement of wages and incomes have led to the application of wage controls in industry as a part of a program for controlling inflationary movements in prices and the cost of living. Because agricultural wage rates had started their rise from a very low level and were considered substandard, to maintain an adequate supply of labor and to produce a record volume of food and fiber required that farm wages continue the upward movement to levels which would assure maximum production of agricultural products.

This situation continued until nearly the close of 1942, at which time authority to control agricultural wage rates was delegated to the Secretary of Agriculture and later to the War Food Administrator by the Director of Economic Stabilization.

Under the terms of the regulations issued, no employer may decrease wages or salaries paid to agricultural labor below the highest salary rate or wage paid for such work between January 1, 1942 and September 15, 1942 without the approval of the War Food Administrator. But farm wages and salaries, may be increased up to the level of \$2,400 per year without the approval of the War Food Administrator unless otherwise determined by the Administrator in the case of particular crops, areas, or classes of employers.

The program of stabilization of farm wages and salaries thus consists of three parts: (1) the setting of a minimum level below which wages and salaries of agricultural labor may not be reduced; (2) general control of agricultural wages and salaries at or above the "\$2,400 per annum" level, and (3) the setting of specific maximum wage rates for particular crops and areas. Up to June 1944 the War Food Administrator has set maximum wage rates for several crops in certain areas of California and Florida. All but one of the wage-ceiling orders have been announced within the last 10 months.

Standards for Determining Wages Subject to General Control

The controls on industrial wage movements were applied on the general principle of holding wages and salaries at the level attained by September 15, 1942. Departures are permissible only with the approval of the War Labor Board. 1/ In contrast with this "freeze" method, agricultural wages can be increased up to the \$2,400 per annum level without approval unless the War Food Administrator has set a specific wage ceiling. 2/ This exemption of agricultural labor from the general wage and salary stabilization order was stated in the regulations of the Director of Economic Stabilization to be based on the following considerations: "That the general level of salaries and wages for agricultural labor is substandard, that a wide disparity now exists between salaries and wages paid labor in agriculture and salaries and wages paid labor in other essential war industries, and that the retention and recruitment of agricultural labor is of prime necessity in supplying the United Nations with needed foods and fibers, ..." 3/

Since the formulation in October 1942 of the original regulations of the Director of Economic Stabilization relating to agricultural wages, certain modifications have been made affecting both the jurisdiction over agricultural labor and the wage level at which control is operative. Agricultural labor was originally defined as "persons working on farms and engaged in producing agricultural commodities whose salary or wage payments exclusive of bonuses and additional compensation and without the contemplated adjustment are not in excess of \$2,400 per annum." In November 1942, jurisdiction over wage and salary workers in agriculture earning less than \$2,400 was vested in the

1/ A brief statement of the development of the National War Labor Board's wage policy, including the role of the "Little Steel" formula in wage adjustments to compensate for the increased cost of living, may be found in W.L.B. What It Is....How It Operates, National War Labor Board, Dec. 1943.

2/ Regulations relating to Wage and Salary Stabilization (as amended August 28, 1943). Authority over the control of wages and salaries exercised by the Director of Economic Stabilization stems from "An Act to Amend the Emergency Price Control Act of 1942, to aid in preventing inflation and for other purposes" (Pub. No. 729, 77th Cong. 2d Sess.), as amended by the Public Debt Act of 1943, entitled "An Act to increase the debt limit of the United States and for other purposes" (Pub. No. 34, 78th Cong. 1st Sess.), and was vested in turn by the President in the Economic Stabilization Director, under Executive Order 9328, dated April 8, 1943 (8 F.R. 4681); The authority was continued in the "Stabilization Extension Act of 1944" (Pub. No. 383, 78th Cong. 2d Sess.) The regulations implementing these Acts conferred on the War Food Administrator authority to administer the provisions relating to the stabilization and limitation of salaries and wages paid to agricultural labor.

3/ Ibid.

Department of Agriculture and for those earning more than \$2,400 but less than \$5,000 in the War Labor Board. 4/ On December 9, 1943, this was amended so as to define agricultural labor more explicitly and to give the War Food Administrator jurisdiction over all agricultural labor except persons whose annual salaries exceed \$5,000. At the same time "\$2,400 per annum" was interpreted to mean "\$200 a month, or the equivalent weekly, hourly, piece work rate or comparable basis, except that in individual cases, salary or wage payments may be more than \$200.00 a month or the equivalent rate for not exceeding sixty days in any one year, if the aggregate wage or salary payments to the laborer, from all sources, are not more than \$2,400 for that year."

The regulations as thus amended were the ones under which the War Food Administration operated until June 1, 1944 when the regulations were further amended. The question of jurisdiction had been simplified by the more explicit definition of agricultural labor, and by broadening the Administrator's authority to control all agricultural wages, regardless of amount, and salaries up to \$5,000. Approval of the Administrator for increases in agricultural wages or salaries was required only when the increase affected wages or salaries which already were or would be brought in excess of \$2,400 a year. However, the meaning and application of the \$2,400 per annum provision had not been fully clarified.

Entirely apart from the fact that very few wage or salary workers in agriculture earn as much as \$2,400 in a year, the meaning of this standard was not clear, for agricultural wages are very seldom contracted on an annual basis. Moreover, literal application of the standard was not generally possible, especially in the case of seasonal laborers, since it presupposed advance knowledge of the annual earnings of individual agricultural workers. Recognition of this difficulty led to the redefinition of the \$2,400 per annum provision to mean \$200 a month or the equivalent weekly, hourly, or piece work rate.

The redefinition retained a clause which permitted earnings of more than \$200 a month for a period not to exceed 60 days in any one year "if the aggregate wage or salary payments to the laborer from all sources of employment as an agricultural laborer are not more than \$2,400 for that year." 5/ Actual

4/ Jurisdiction over wages and salaries of persons earning \$5,000 or more is vested in the Commissioner of Internal Revenue.

5/ The 60-day provision stemmed from the fact that jurisdiction over agricultural labor by the War Food Administrator was originally limited to wages and salaries up to \$2,400 a year. The 60-day clause was inserted because it was foreseen that some seasonal agricultural workers might be employed for short periods at a rate equivalent to more than \$200 a month and thus pass out of the jurisdiction of the War Food Administrator. A case in point was a wage ceiling contemplated at the time for asparagus workers in California which involved a rate capable of yielding earnings in excess of \$200 a month. In the amendment of Dec. 9, 1943, the extension of jurisdiction was granted directly, but the 60-day clause, which was intended to grant such an extension indirectly, was not omitted.

application of the redefined standard of \$200 a month with the 60-day clause was as difficult as applying the original per annum standard. The need for wage stabilization was deemed greatest in the case of seasonal workers in crops with relatively high wage rates.

In the case of most such workers however, it was not possible to apply these wage standards (including the 60-day clause) since many seasonal workers do not work as much as 60 days on any one farm and because the employers had no way of knowing whether their workers would or would not earn \$2,400 from agricultural work during the year. But the 60-day provision did prevent the substitution of the \$200 per month, or a rate equivalent thereto, for the original standard of \$2,400 a year in the case of seasonal workers.

On June 1, 1944 the Director of Economic Stabilization and the War Food Administrator announced certain additional amendments relative to salaries and wages of agricultural labor. 6/ The major change was to eliminate the 60-day provision in the definition of the "\$2,400 per annum" standard and thus to define that standard to mean "\$200 a month or the equivalent weekly, hourly piece work rate or comparable basis."

The definition of \$2,400 a year as thus amended does three things: (1) it substitutes a rate concept for the previous earnings-per-year concept; (2) it sets \$200 a month or the equivalent thereof in a shorter time-unit or in piece rates as the level at which general control of farm wages is operative, and (3) it makes the general wage regulation applicable to seasonal as well as regular farm workers.

An important feature of the June 1, 1944 amendments was to provide explicitly that "payment of total compensation, including bonuses, perquisites, and other additional forms of compensation in the same amount or at the same rates as those made lawfully between December 9, 1942 and December 9, 1943, may be made without approval even though that compensation is more than \$2,400 per annum." This proviso makes clear that wage or salary rates paid during 1943, even though equivalent to more than \$200 per month, could continue to be paid without requiring the Administrator's approval. 7/

6/ 9 F. R. 6011 and 6035

7/ Wages or salaries of agricultural workers which amounted to \$2,400 or more per annum as of December 9, 1943 cannot be increased without approval, nor can an increase be made in the case of workers receiving wages of less than \$2,400 per annum if the effect of such an increase (whether in wages, bonuses or perquisites) would be to raise the total wage or salary above the \$2,400 per annum level (\$200 per month). Overtime payments need not be included in ascertaining whether the wages exceed the \$2,400 per annum level providing it was the practice of the employer before December 9, 1943 to pay for overtime and providing there was no increase in the rate of payment for overtime after that date.

The June 1944 amendments made no change in the regulations that affect the setting of specific wage ceilings by the Administrator for areas, crops, or classes of employers, or in the regulations governing decreases in agricultural wages. Once a wage ceiling is determined for a particular crop and area, the payment of a rate that is higher than the ceiling is not permitted except in those cases where an employer was paying a particular employee doing the same type of work a higher rate in the period Jan. 1, 1942 - Sept. 15, 1942. There is no restriction which prevents the Administrator from setting a specific wage ceiling below the level of \$200 per month or rates equivalent thereto.

These amendments mark a basic change in the criteria and standards for general wage stabilization in agriculture. Initially the program was guided by an annual-earnings standard of \$2,400 a year. This was a much higher level than that actually attained by the great majority of agricultural workers. In retrospect, it appears that the major intent of the \$2,400 standard was to permit the degree of flexibility of movement in agricultural wage rates necessary for the retention and recruitment of the labor required for meeting war food production goals. The implementation of the \$2,400 standard was difficult except in the case of a relatively few year-round workers whose earnings approached this standard, while for all other farm workers the stabilization policy implied by this standard required little in the way of administrative implementation.

Both the December 9, 1943 and the June 1, 1944 amendments indicate that no serious consideration was given to the retention of the annual-earnings standard, since a conversion of \$2,400 a year to \$200 a month disregarded the fact that the majority of hired farm laborers work on farms less than 12 months during a year and that their annual earnings from agricultural work are generally not evenly distributed in the different months. 8/ The wages of many year-round farm laborers are lower in the slack part of the year than in the busy months, while in the case of seasonal workers there is much more of a lumping of earnings.

The Administrator's regulations now governing general stabilization of farm wages provide no indication or guidance as to the basis to be used for converting the \$200 per month standard into equivalent daily, hourly, weekly, or piece rates. 9/ The individual farmer who pays his laborers on a non-monthly basis must ascertain for himself whether the rates he is paying, or

8/ Available data indicate that a per annum wage standard of \$2,400 which gave effect to the average duration of farm employment in 1943 would show a straight monthly equivalent of more than \$300. The same data indicate that a conversion based on the total number of days worked on the average by hired farm workers in 1943 would be equivalent to nearly \$14 per day. (For relevant data on duration of farm employment, see Chap. 7 and The Farm Working Force of 1943, Bur. Agr. Econ., 1944.)

9/ The WFA Wage Board for the State of California, to whom complete authority for the administration in that State of the general wage and salary regulations was delegated by the War Food Administrator (9 F.R. 6050), has issued general instructions for translating the \$200 a month into equivalent rates (Calif. War Board, War Letter No. 582). But these instructions do not provide a basis for meeting the difficulties discussed in the text above.

that he contemplates paying are equivalent to more or less than \$200 a month. If the rates (inclusive of perquisites, bonuses, etc.) are equivalent to more than \$200 a month and if these rates are higher than those paid by him during the year preceding Dec. 9, 1943, until approval is obtained these rates will not be lawful. By varying for individual crops, operations, or enterprises, any one or more of such factors as hours worked per day, days worked per month, the valuation placed on perquisites, the amount credited as overtime payment, and in the case of piece rates the additional factor of the worker's performance per unit of time, the employer may arrive at almost any daily, hourly, or piece-rate equivalent that he desires. The possible range in so-called equivalent rates is so great that wage stabilization could be made quite ineffective. The wide latitude now possessed by the individual employer of farm labor in determining the equivalent of \$200 per month makes enforcement of these regulations exceedingly difficult.

As the major part of the country's cash farm wage bill is paid to laborers who are hired on other than a per-month basis, willful or unwitting non-compliance with the intent of the regulations in the determination by employers of equivalent rates would defeat the objectives of wage stabilization. In 1939, only 38 percent of the Nation's cash farm wage bill was paid to labor hired by the month, the remainder was paid to labor hired by the day or week or on piece-rates or other basis. 10/ Moreover, it is conceivable that even in the case of workers paid by the month, the intent of the regulations may be circumvented through such means as shifting to some other basis of payment and rationalization of the time units or work-units represented by the wage payment.

Although the above considerations give rise to difficulties in administering the general agricultural wage-stabilization regulations, it is anticipated that the program as a whole will place greater reliance for effectuating wage stabilization on specific wage ceilings for crops and areas than on the administration of the general wage and salary regulations.

Operation of Specific Wage Ceilings

In April 1943 the War Food Administrator for the first time exercised his authority in setting specific maximum wage rates. He issued a wage-ceiling order relating to cutting and boxing of asparagus (for canning) covering 5 counties in California. Since then and up to June 1944, 10 other wage-ceiling orders have been issued. These 11 orders affected 9 crops in California and citrus fruits in Florida. The crops, operations and areas involved in these ceiling orders are summarized in table 60.

Under the procedures used, the State Wage Board appointed by the Director of the Office of Labor of the War Food Administration holds public hearings and makes recommendations to the Director regarding the wage ceiling

10/ See table 12, p. 46.

Table 60.-Specific wage-ceiling orders issued, April 1943-May 1944

Commodity and season to which order is applicable	Date of wage ceiling orders	Area covered by order	Operations covered by order	Rates set
Asparagus 1943	April 12, and May 1, 1943	California: 5 counties	Cutting & sledding, hand & machine washing, boxing and racking	Schedule 1/
Asparagus 1944	Jan. 20, 1944	California: 5 counties	Same as above, including ranch packing	Schedule 1/
Canning tomatoes 1943	Aug. 24, 1943	California: 13 counties	Picking	Round tomatoes, 17¢ Pear-shaped 21¢ per 50 lb. box
Grapes for Sun-Dried Raisins 1943	August 26, 1943	California: 8 counties	Picking grapes	Schedule 1/
American Upland Cotton 1943-44	Oct. 8, 1943	California: 6 counties	Picking seed cotton	\$2.25 per cwt.
	Dec. 22, 1943	California: 6 counties	Snapping seed cotton	\$1.50 per cwt.
Citrus fruits 1943-44	Nov. 25, 1943	Florida: Entire State	Harvesting citrus fruits; loading or driving trucks in groves	Schedule 1/ Driving, 60¢ Loading, 70¢ per hr.
Alfalfa hay 1944	April 4, 1944	California: Imperial Valley	Mowing, raking, hauling, piling, loading; (& baling of flax straw)	Schedule 1/
	April 18, 1944	California: Portions of 11 counties	Picking up early potatoes	12¢ per cwt. or 70¢ per hr.
Potatoes 1944	May 9, 1944	Same as above	Loading & hauling early potatoes	\$.90-\$1.20 per ton according to distance
Oranges 1944	April 20, 1944	California: 3 counties	Tree picking Valencias	15¢ per standard field box
Fresh market peas 1944	May 4, 1944	California: Portions of 2 counties	Picking	65¢ per 28 lb. or 70¢ per hr.
	May 4, 1944	California: 5 counties	Picking	60¢ per bu. or 75¢ per hr.
Cherries 1944	May 22, 1944	California: 9 counties	Picking	4¢ per lb. or \$1.00 per hr
	May 22, 1944	California: 8 counties	Picking	4¢ per lb. or 90¢ per hr.

1/ A schedule of different piece rates for different operations as specified in orders issued by the War Food Administrator.

to be set by the Director or the War Food Administrator. 11/ In the case of all specific farm-wage ceilings set to the end of the fiscal year 1944 War Food Administration officials have followed a policy of establishing a wage ceiling only at the request of the growers concerned. Provisions incorporated by the Senate and House in the bill that appropriates funds for farm-wage stabilization for the fiscal year ending June 30, 1945, specify that wage ceilings be set only if a majority of the producers of a commodity in the area affected request such action on the part of the Administrator. 12/

Experience in California with the wage-ceiling orders issued last year--how they worked out in practice, the problems confronted, and the results achieved--is set forth in a series of reports issued by the Bureau of Agricultural Economics. 13/ These studies indicate that the ceiling orders have assisted in stabilizing wage and employment conditions in the crops affected and to some extent in other crops. Operation of the wage ceilings was more successful in some crops than in others. Important factors in determining the degree of success included wage level set, wage differentials among various operations in a crop, and degree of flexibility in policies followed with respect to wage adjustments above the ceiling rates. In the case of some of the crops, the successful operation of the ceiling order was promoted by a satisfactory labor supply situation and by the efficient operation of the farm-placement system of the Agricultural Extension Service.

No study has as yet been made of the operation of the wage ceiling relating to citrus fruits in Florida, during the 1943-44 season. Growers have apparently been satisfied with the operation of the wage ceiling, as is suggested by the number of grower requests for the issuance of a ceiling order for the 1944-45 citrus fruit harvest. But the wage order met with criticism

11/ For a description of the functions and responsibilities of the State WFA Wage Boards, see Handbook for State WFA Wage Boards, War Food Administration, Office of Labor, May 30, 1944. See also Office of Labor Memorandum No. 25, War Food Administration, Jan. 26, 1944.

12/ Original action by the House disapproved the requested appropriation of \$800,000 for farm-wage stabilization. The Senate bill restored \$400,000 and permitted wage stabilization "where a 'substantial number' of the producers of a commodity affected request the intervention of the War Food Administrator. When the House and Senate bills went to conference, agreement was reached on the \$400,000 appropriation for farm-wage stabilization with the proviso that a "majority" instead of a "substantial number" of the producers affected must request the intervention.

13/ These studies were made by William H. Metzler of the Bur. Agr. Econ. Berkeley, California, who has studied closely the operation of wage ceilings since they were placed in force. The following reports were issued during 1943 and 1944: Analysis of the Operation of Wage Ceiling in the Asparagus Industry, Sacramento-San Joaquin Delta, 1943; Analysis of Operation of Wage Ceiling Order for Harvesting Tomatoes, California, 1943; Analysis of the Operation of the Wage Ceiling on Picking Sun-Dried Raisin Grapes, California, 1943.

from some worker groups. 14/

The initial experience with last year's wage ceilings in California and in Florida indicates that there is no substitute for full, factual information as a basis for appraising the effects of a contemplated ceiling on all groups concerned--large and small farmers, owners and tenants, workers and labor contractors. Difficulties arise if the information which the State Wage Board needs as a basis for recommending a ceiling rate and for guidance in administration of the ceiling is unduly weighted by the views and interests of one group as against another. These difficulties may take the form of either inadequate compliance or an artificial shortage of workers.

So long as the basic method of farm wage stabilization is to determine specific rates for particular crops, operations, and areas, as contrasted with the method of freezing the wage level existing as of a specific period, the need is especially great for State Wage Boards to supplement information gathered at public hearings with independent research and investigation. The need for supplementary information would not be eliminated, however, even if the policy were followed of stabilizing specific farm wage rates at their 1943 levels, as was done, for example, in the 1944 wage order for cutting cannery asparagus. Whether carrying over wage rates prevailing in the preceding year would assure the necessary labor supply would have to be carefully determined in the light of current conditions of the labor market, competitive wage rates, and changes in cost of living.

Extension of Farm-Wage Stabilization

The program of agricultural wage stabilization may be extended during 1944. Because only first steps have been taken, so far, in stabilizing wages, it is not possible to foretell how the agricultural wage stabilization program as a whole will work out. Much will depend on considerations of policy, administrative procedure, educational measures, and research and enforcement.

14/ The Florida Citrus and Allied Workers Union Local 4, UCAPAWA, CIO, protested the wage-ceiling order issued by the Administrator, charging that the State Wage Board hearings:

"Did not investigate or establish what correct scale was necessary in order to eliminate sub-standard wages, neither did it investigate disparity of those agricultural wages with industrial wages, nor did it investigate or establish what wage scale was necessary to meet adequately the problem of retention and recruitment of agricultural labor to meet labor demands of this war time citrus industry." (Telegram dated Dec. 6, 1943 from D. Henderson, General President, UCAPAWA, CIO, to Marvin Jones, War Food Administrator.)

facilities that remain to be developed. The program must be soundly conceived and selectively applied to situations in which there is a real need for stabilizing agricultural wages if it is to accomplish its two-fold objective of contributing (1) to the Nation's efforts to stabilize prices and wages and (2) to the maintenance and efficient utilization of the labor force required to produce the food and fiber called for by wartime goals.

Of even greater importance to the success of a program of farm wage stabilization will be the extent to which administrative policies at all levels steer a balanced course toward these objectives, unhindered by pressure from organized groups whose self-interests may lead them to attempt exploitation of the program for their own economic advantage.

In agriculture, unlike the case in industry, there is no tradition of collective bargaining between employers and employees. Hired farm workers are generally unorganized and inarticulate. Attempts at general wage stabilization may have quite different effects in agriculture than in industry. Effective representation of industrial workers' point of view by strong unions together with the tri-partite functioning of the War Labor Boards, facilitates the operation of wage stabilization in nonagricultural industries. In agriculture, where Wage Boards consist of public officials who are not appointed on the basis of tri-partite representation, it is most important for the Board to carefully sift and weigh the evidence and facts brought before it so that its decisions and recommendations may not be influenced by one-sided evidence.

Wage Boards in agriculture face extremely difficult tasks because of the lack of standardization in jobs, operations, and employment practices, and the real dearth of factual information on agricultural and competitive wage rates, conditions of the labor market, on cost, income, and other types of data that are basic to its decisions. These difficulties are further complicated by weaknesses in the regulations regarding farm wage stabilization which on the one hand may make stabilization difficult to achieve and on the other hand may make for stabilization at too low a level. One or the other situation might arise, for example, if an organized group of employers agreed on rates "equivalent" to \$200 per month which represented an unreasonable conversion on the high or low side.

Other Forms of Wartime Regulation of Farm Wages

Determinations of Prevailing Farm Wage Rates.—Under the terms of the agreements negotiated by the United States Government with the Governments of Mexico, Jamaica, the Bahamas, and Newfoundland, workers imported from these countries for wartime farm work in the United States are to be paid the "prevailing wage rates" in the crops and areas involved. The payment of "prevailing wage rates" is also required in the case of farm workers.

transported by the War Food Administration from one State to another. 15/

The War Food Administration has the responsibility for prescribing the procedures by which determinations are made of prevailing farm wage rates for the crops and areas where such labor is used. Although involving a form of governmental supervision over farm wage rates paid to special groups of workers, the determination of prevailing wage rates is basically different from the type of Government regulation of wage rates represented by the wage stabilization program or any other wage-fixing program. The issuance of findings with respect to prevailing wage rates for particular crops and areas is incident to the recruitment, transportation, and placement of foreign and interstate labor for which funds were appropriated by Congress to the War Food Administration under Public Law No. 45, approved April 29, 1943 and Public Law No. 229, Feb. 14, 1944. These Acts specifically provide that:

"No part of the funds appropriated in this title, or heretofore appropriated or made available to any department or agency of the government for the recruiting, transportation, or placement of agricultural workers, shall be used directly or indirectly to fix, regulate, or impose minimum wages or housing standards, to regulate hours of work, or to impose or enforce collective-bargaining requirements or union membership, with respect to any agricultural labor, except with respect to workers imported into the United States from a foreign country and then only to the extent required to comply with agreements with the Government of such foreign country: Provided, That nothing herein contained shall prevent the expenditures of such funds in connection with the negotiation of agreements with employers of agricultural workers which may provide that prevailing wage rates shall be paid for particular crops and areas involved and that shelter shall be provided for such workers."

These laws vested certain responsibilities upon the State Extension Services for all phases of the intrastate labor recruitment and placement program and for the placement of interstate and foreign workers. The State Extension Services are therefore required to assist in any determination of prevailing wage rates for farm work.

The procedures prescribed by the War Food Administration and the Federal Extension Services for making such wage determinations include the setting up of County Farm Wage Boards which are required to hold a public hearing,

15/ Payment of "prevailing wage rates" are also required in counties where prisoners of war, soldiers assigned in units by the War Department, and Japanese evacuees on W. F. A. contracts are employed in farm work. Payment by farmers for the work of war prisoners and assigned soldiers is made direct to United States Treasury.

to make such further investigation as the Board may deem appropriate, and to make findings and recommendations as to the prevailing wage rates. Such findings and recommendations, are transmitted by the County Wage Board to the State Director of Extension, who, in turn, determines or issues the finding as to the prevailing wage rate. ^{16/} The County Wage Board is composed of the County Agent, who serves as Chairman, and four other members (from the County Farm Labor Advisory Committee) appointed by the County Agent.

From May 1943, when the Farm Labor program under Public Law 45 began to operate, until the end of 1943, 1,020 County Wage Boards were set up in 42 different States, and 1,398 hearings were held. During 1943, approximately 50,000 Mexicans, nearly 9,000 Jamaicans, and 4,000 Bahamians were imported into this country for agricultural work. From January 1944 to the end of May 1944, approximately 47,000 foreign workers were in the country available for or actually engaged in farm work.

Hearings held by County Farm Wage Boards are informal and consist mainly of growers' testimony as to what they consider to be the "going" wage rates paid in the county for particular crops and operations. On the basis of this information the State Director of Extension determines the prevailing wage rate for a particular crop or operation. The wage may be in terms of a certain rate per hour, day, week, or month, or it may be a piece rate. The rate may or may not include room and board or other perquisites. The wage rates determined, in some cases, differentiate between beginners and experienced workers and between men and women. For given types of labor, the prevailing wage rates sometimes show differentials depending upon the perquisites or services included. There are also differences from county to county in the prevailing wage rate for a given crop or operation, although so far as possible, the State Director of Extension attempts to make determinations that are relatively uniform for contiguous counties.

Farm Wage Regulation for Workers in Sugar Beets and Sugarcane.--The setting of minimum wage rates for farm workers employed in the production of sugar beets and sugarcane has been in effect ever since 1937 when the Sugar Act was passed. This Act provided that the receipt of benefit payments by producers of sugar crops be made conditional upon the payment to labor of wage rates not less than those determined by the Secretary of Agriculture to be "fair and reasonable". The establishment of such rates is in effect a form of wage regulation, and it has represented the only instance where minimum wages have been provided by Federal legislation for farm workers in the United States. Although such wage regulation was not inaugurated as a wartime measure, it has continued during the war and has recently been prolonged by the extension of the Sugar Act.

^{16/} Determination of Prevailing Wage Rates for the Purposes of Public Law 45, 78th Congress, EFL. Circular No. 8, Washington, D. C. June 4, 1943. At the discretion of the State Extension Service, the same procedure may be used for determining prevailing wage rates as an incident to the recruitment of intrastate labor.

In peacetime, the determinations made by the Secretary of Agriculture of "fair and reasonable" wage rates for sugar beet and sugarcane operations generally became the prevailing wage rates for the season. In wartime, the shrinking of the labor supply has resulted in the payment by some growers of wage rates higher than the minimum specified in the wage determinations of the Secretary of Agriculture. The number of situations in which this has been the case probably occurred more frequently in 1942 than in 1943--a fact partly related to the rapid depletion of the labor supply during 1942 and its relative stabilization in 1943 following various manpower measures for maintenance of the agricultural labor supply. In general, the wage determinations for sugar crops have been guided by the customary relationships between wages and prices or income from sugar crops and, in recent years, by the principle that the wage determinations should not be unduly influenced by the pressure of a short labor supply on the wage rate level.

These considerations have been partly responsible for the fact that the upward trend in general farm wage rates between 1939 and 1943 has greatly exceeded the rate of increase in sugar beet wage rates set by the Department of Agriculture, since the former has been affected by the reduced labor supply.

The latest wage determination for sugar beet workers, (that relating to the 1944 crop) provides that the wage rates agreed upon by the employer and the workers shall be deemed fair and reasonable but that they shall not be less than the rates specified in the determination for 1943 which were approximately 56 percent above the rates in 1938-40. The effect of this determination on the 1944 level of sugar beet wages cannot as yet be ascertained but the wage rates paid will undoubtedly be influenced by the relative bargaining position of labor during the year. This, in turn, will be affected by the condition of the general labor supply and by the governmental program with respect to importation of Mexican and other foreign labor and the use of emergency workers, such as war prisoner and volunteer youth groups. The 1944 determination of wages for cultivating sugarcane in Louisiana and Florida specified minimum rates which represented increases of 70 percent and 65 percent respectively above the minimum wages effective in the 3-year period 1938-40.

* CONSIDERATIONS FOR POST-WAR AGRICULTURAL WAGE POLICY

This report of agricultural wages has examined the functional role of hired farm laborers in our agricultural economy, the rewards received by them for their labor, and their changing welfare in times of war and in times of peace--through periods of depression and years of prosperity. It has described the group of people who work for wages on farms, their numbers, their composition, their status, and their distribution.

The various aspects of the analysis now need to be synthesized from the standpoint of their possible implications for the future welfare of hired farm laborers. For, after all, a major purpose of this study is to provide a basis for understanding how the various wage conditions examined have affected, and may affect in the future, the lives and functioning of farm laborers as a body of people--a productive segment of our citizenry.

It is also necessary to indicate more explicitly the interacting influence of factors within and outside of agriculture which determine in large part the economic conditions for both farmers and farm wage workers.

Post-war social and economic policy affecting agriculture will no doubt be influenced by the twin objectives of full employment in peacetime and a progressively better balance in agriculture between population and resources. The keystone of post-war policy may become the conversion of wartime experience in the achievement of full employment into a peacetime reality.

To the extent that such goals are not achieved, there will be present the dangers of the recurrence of past conditions of unemployment and population pressures with their depressing effects on the wage and income conditions of all groups, and particularly on the level of living of farm laborers and of farmers. In the formulation of post-war social and economic policy, it is important that farm laborers do not again become the "forgotten men."

The Record in Brief Resume'

Agriculture includes around 4 million people who work for wages on farms during at least some part of the year. These workers and their families comprise a group of some 6 to 8 million persons who are wholly or partially dependent on agricultural wages for their income. A majority of the hired laborers are to be found on a small proportion of the Nation's farms, but it is on these farms that the bulk of the country's food and fiber is produced. Hired laborers make up a fourth of the farm working force, but as they are so heavily concentrated on the larger or more productive farms, the work of hired laborers makes possible much more than one-fourth of the total farm production.

People recorded in our statistics as hired farm laborers are in reality a mixture of lower income farmers, members of farmers' families, people who work part-time in town and cities, youths who attend school in the winter, as well as migratory workers who follow the crop harvests and year-round hired men. Hired farm workers are thus quite a broad segment of our population whose economic and social interest tie in at numerous points with those of the rest of the population.

Only in a period of national crisis brought on by war, however, has there been a recognition of the identity and importance of farm laborers in our economy. The changed conditions from those of a few years ago are epitomized by some marked contrasts. Gone is the spectacle of unwanted migrants travelling in jalopies from State to State in search of farm work. On the contrary, it has been necessary for the Government to bring in thousands of workers from foreign countries and to provide free transportation for them and for many domestic farm laborers in order to help meet seasonal labor needs in important producing areas. Likewise, the inadequate wages that seemingly could not be raised during pre-war years to a minimum subsistence level may now be contrasted with the rapidly climbing wage rates of certain farm workers on which ceilings are now being placed.

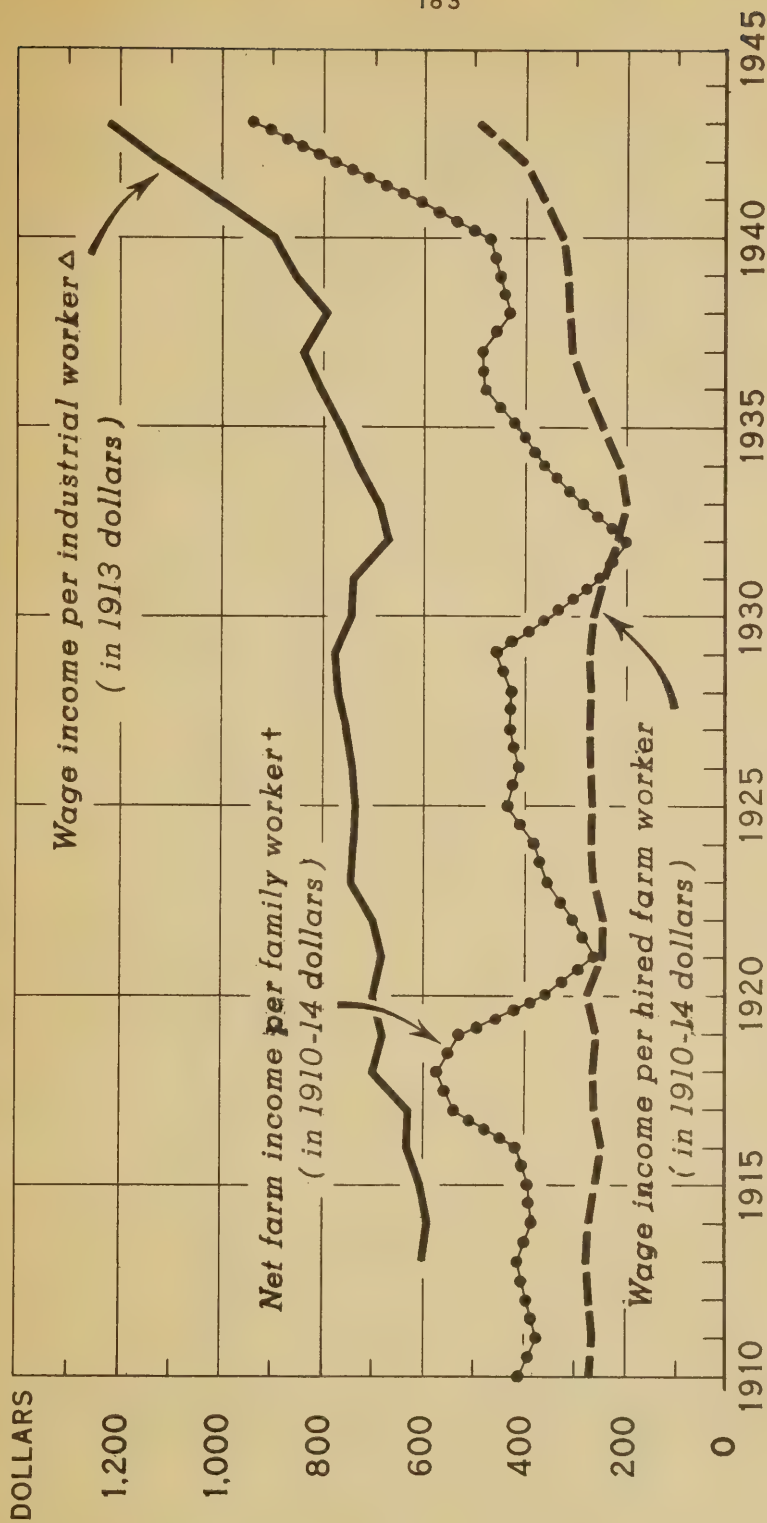
From the standpoint of public policy, the record over the three decades preceding this war is one of neglect of the interest and welfare of farm laborers. Despite their progressively rising level of productivity, their real wages and income were at a dead level in practically all years from 1910 to 1930 (figs. 21 and 22), averaging \$265 dollars in terms of 1910-14 purchasing power--an amount far below that required for a level of living consistent with health and decency. The ground lost during the depression in the real wage incomes of farm laborers was finally regained and a moderate improvement was recorded during the last few years before this country entered the war.

The absence of any substantial gain in the real wage income of farm laborers in the three decades preceding 1940 contrasts sharply with the progressively rising trend in the average wage income of industrial workers, despite the depressing effects of mass unemployment which characterized the 1930 decade. Real wage income per industrial worker climbed from an average of \$600 in 1913 to \$739 in 1930, to \$855 in 1939, and to an average during the 4 years 1940-43 of \$1,060 (in terms of 1913 dollars).

During the first World War farm wage rates rose to unprecedented heights, but the cost of living climbed equally high, so farm laborers were no better off than before. Thus far in the present war, measures for controlling inflation are being applied more successfully. Consequently, real farm wage rates and wage income per hired farm worker have shown an improvement, but so have wages of industrial workers which had been steadily rising since the years before World War I. Therefore, the gap in real wages between farm and industrial workers is wider during this war than ever before.

While the average real net farm income per farm family worker (in terms of 1910-14 dollars) has fluctuated considerably in the period 1910-39, it declined to approximately the hired laborer's level only in the depression

WAGE INCOMES OF INDUSTRIAL WORKERS AND OF HIRED FARM WORKERS AND NET FARM INCOME OF FAMILY WORKERS, ADJUSTED FOR CHANGES IN LIVING COSTS*, UNITED STATES, ANNUAL AVERAGES PER WORKER 1910-43



* INCOME PER INDUSTRIAL WORKER ADJUSTED BY THE BUREAU OF LABOR STATISTICS INDEX OF COST OF LIVING; INCOME PER HIRED FARM WORKER AND PER FARM FAMILY WORKER ADJUSTED BY THE BUREAU OF AGRICULTURAL ECONOMICS INDEX OF PRICES PAID BY FARMERS FOR COMMODITIES USED IN FAMILY LIVING.

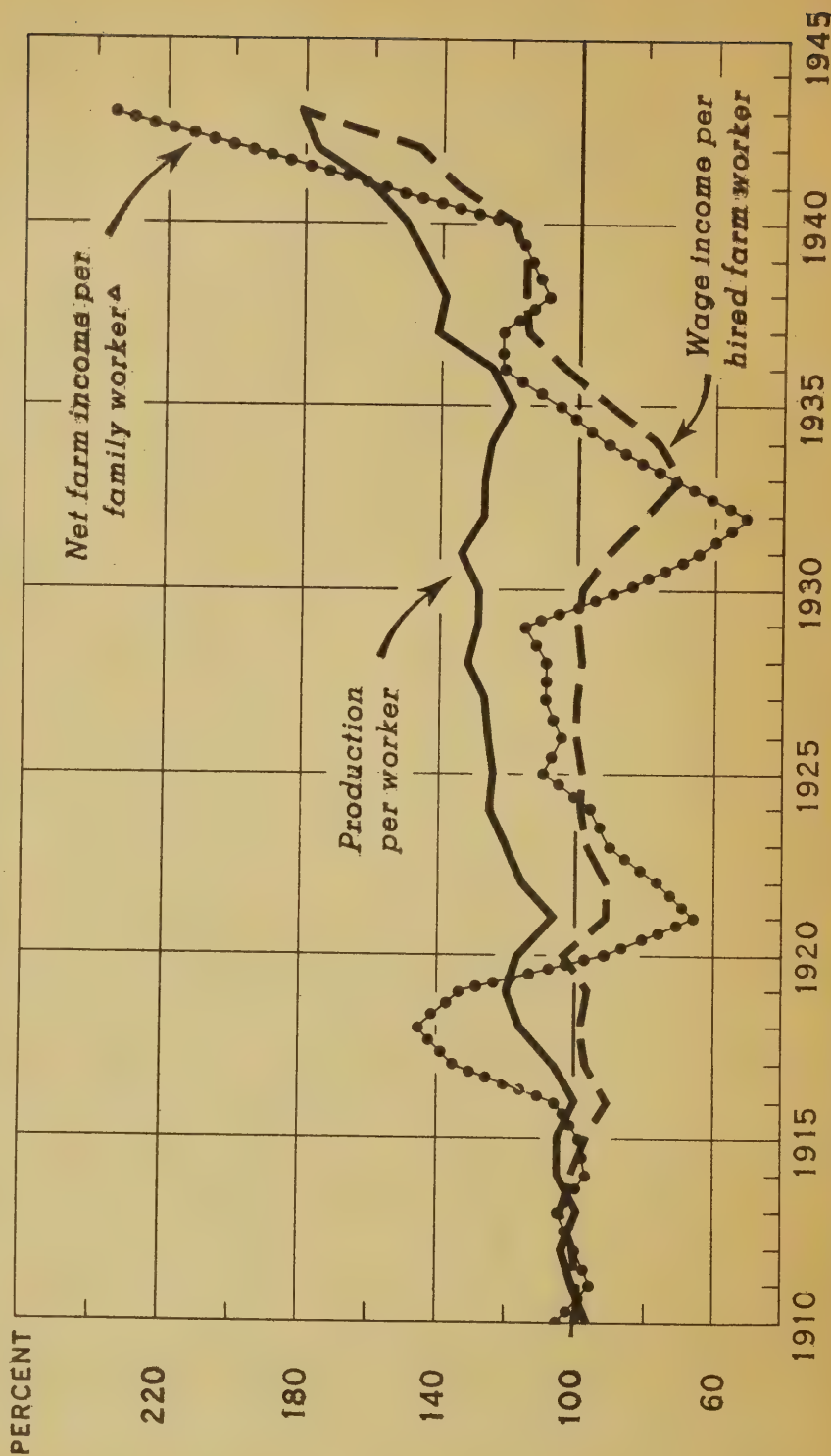
Δ INCLUDES FACTORY, MINING, AND RAILROAD EMPLOYEES

† INCLUDES FARM OPERATORS AND UNPAID FAMILY WORKERS

ESTIMATES FOR 1943 ARE PRELIMINARY

AGRICULTURAL PRODUCTION PER WORKER AND INCOME PER FARM WORKER ADJUSTED FOR CHANGES IN LIVING COSTS*, UNITED STATES, 1910-43

INDEX NUMBERS (1910 = 100)



* ADJUSTED BY THE INDEX OF PRICES PAID BY FARMERS FOR COMMODITIES USED IN FAMILY LIVING
△ INCLUDES FARM OPERATORS AND UNPAID FAMILY WORKERS
ESTIMATES FOR 1943 ARE PRELIMINARY

years of 1921, 1931, and 1932 (fig. 21). For the whole period 1910-39, real net income from farming per farm family worker averaged \$400 while real farm-wage income (including perquisites) per hired worker averaged \$263. In the last 4 years, 1940-43, the averages have risen to \$700 for all family workers and \$393 for hired workers (in terms of 1910-14 dollars).

In the various measures of social legislation in the United States enacted to protect workers from the hazards of accidents, old age, and unemployment, and to protect wage and hour standards, farm laborers have been excluded. Although agricultural conditions present certain differences which would call for adaptations in the form and content of social legislation, these differences have not prevented the extension of such legislation to agriculture in other advanced countries. In our own country the various agricultural programs designed to improve the economic lot of farmers have made no explicit recognition of the rights of wage workers to share in such benefits except in the single case of the Sugar Act, where the payment of fair and reasonable wages was made a prerequisite to receiving Government benefit payments.

The advances of the last three decades in medical and technological sciences, together with the diffusion of educational opportunities, have manifestly improved and enriched the level and content of living for the population at large. Our rural population, however, has shared less than proportionately in these national gains, and hired farm laborers and their dependents have on the whole benefited the least. By whatever criteria the comparative position of farm laborers is measured--in terms of housing standards, health standards, educational levels, or income levels--the results of the comparison testify to the disadvantaged position of these people in our economy. Moreover, that traditional hope and incentive of the hired man--who in years past looked forward confidently to climbing up the ladder through tenancy to farm ownership--seems to have been impaired rather than improved with the increasing commercialization of our agricultural economy.

Some Underlying Conditions and Post-war Implications

Mobilization of the national economy for war has transformed it within a few years from a condition of operating much below capacity to one approaching a maximum. Manpower surpluses have been replaced by manpower shortages and a depressed agriculture has become prosperous according to all past standards. But present conditions carry no guarantee against the return of those conditions which have for so long resulted in the disadvantaged position of farm laborers. Wartime experience underscores the basic nature of past maladjustments within our general economy and their effect on agriculture--that is the under-utilization of our human and physical resources.

The crux of post-war problems is the question of whether full employment will be maintained when the Nation's productive capacity is turned to peacetime uses. Some guidance is needed in implementing a post-war program to provide some degree of assurance of continuing opportunities for improving the economic welfare of farm laborers. Therefore, it is necessary to examine some

of the underlying factors which have played important roles in determining the economic welfare of farm laborers in the past.

From charts depicting the comparative economic levels of different segments of our economy it is clear that the pattern of conditions for hired farm laborers is closely related to the pattern for farmers ^{1/}, and that of farmers is in turn dependent upon the level at which the rest of the economy is functioning. Maintenance of farmers' income at satisfactory levels is a prerequisite to establishing satisfactory farm wage levels in the post-war period. The welfare of both farmers and their hired workers are closely tied to general economic conditions in the country as a whole (fig. 23).

Real net farm income rises with increases in the volume of nonagricultural employment. In times of extensive unemployment, farm wage rates are low both because of the pressure of a surplus labor supply and because of reduced farm income. Thus mass unemployment during the depression years (exceeding 13 million persons) carried with it a level of farm wage rates of approximately \$1.25 a day (in terms of 1940 dollars), and a very low level of real net farm income. Farm income climbed out of the depression and rose to successively higher levels with progressive increases in nonagricultural employment. The recovery of farm wage rates, however, was much slower, as considerable unemployment still prevailed as recently as 1941. Farm wage rates attained a level of \$2.50 a day (in 1940 dollars) only when unemployment was reduced to almost a minimum level. The significance of full employment to both farmers and hired farm workers is evident from the relationships shown in figure 23.

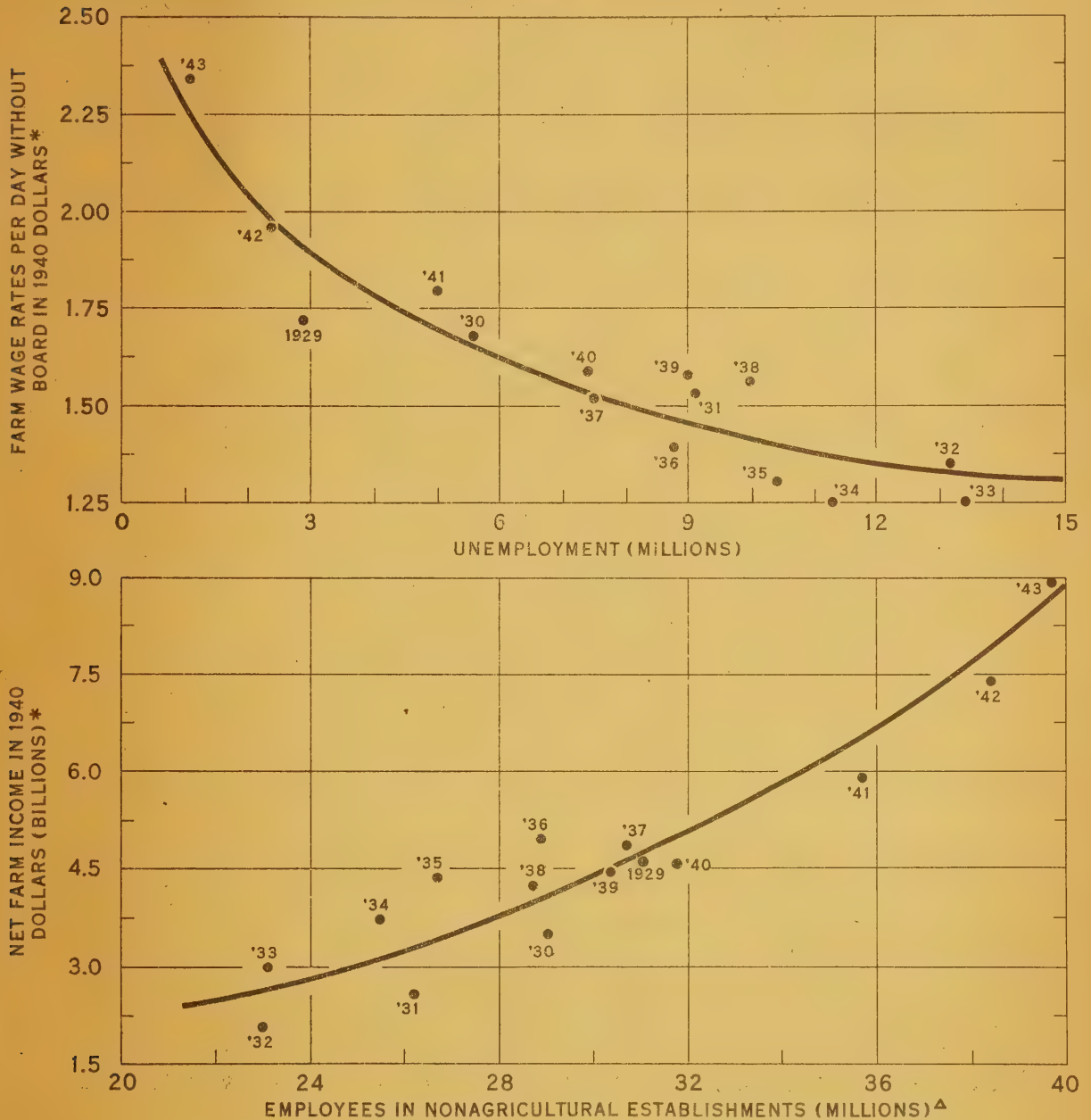
The interdependence between farmers' income and income received as wages by hired laborers means that the two change in the same direction, and overall national or regional figures on farm income and farm wages indicate that this has been the case over the whole period for which information is available. Data are not available to indicate how close the relationship is in the case of those groups of farms which mainly comprise the employing sector. Although there is reason to assume such a relationship, the changes in net income for labor and management on such farms and in annual wage income per worker occur at absolute levels which are greatly different.

In recognizing the interdependence between the level of farm income and the level of farm wages, it should also be recognized that the comparative economic conditions of farmers who do the bulk of the hiring and of the workers they employ cannot be correctly appraised from farm-income data based on totals or averages for all farms. The all-farm average farm income reflects the depressed or impoverished conditions of a great mass of people who subsist on farms and who contribute very little to commercial production, but it does not fairly represent that sector of our agricultural economy which furnishes the bulk of our agricultural production where the problems of farm wages and wage workers are heavily concentrated.

The fact is that the major share of agricultural production and agricultural income is produced and received by only a fraction of the farms and farmers. In 1929, it is estimated that the upper 10 percent of the Nation's

^{1/} See figure 10.

RELATION OF REAL FARM WAGE RATES AND FARM INCOME TO UNEMPLOYMENT AND EMPLOYMENT, UNITED STATES, 1929-43



* ADJUSTED FOR CHANGES IN RURAL COST OF LIVING BY THE B. A. E. INDEX OF PRICES PAID BY FARMERS FOR COMMODITIES USED IN LIVING

^Δ BUREAU OF LABOR STATISTICS; EXCLUDES SELF-EMPLOYED AND DOMESTIC SERVANTS

FIGURE 23

farms produced 47 percent of the marketed products, while in 1939 the upper 10 percent of the farms accounted for 54 percent of the Nation's sales of farm products (fig. 24).

The concentration of hired workers on a small proportion of the farms is even more marked. In 1939 more than two-thirds (68 percent) of the cash farm wage bill was paid on only 9 percent of the Nation's farms. There are no comprehensive data to show the changes over a period of years in the amount of net farm income of the groups of farmers who are important employers of hired labor. That there is a big spread between the average net income of such farmers and the average for all farms is suggested by available data for 1939. In that year, the estimated net returns for family labor and management of farms with a gross value of production of \$4,000 or more, averaged \$2,305 per farm as compared with \$350 for all farms.

Because agricultural wage problems effect primarily a special sector of agricultural producers, the essential nature of these problems cannot be brought into sharp focus without disentangling the conditions of farmers who in the main do the hiring of labor from the conditions affecting the mass of low-income farmers. Formulation of sound agricultural wage policy requires such differential analyses in order to fit programs affecting agricultural wages to the problems peculiar to the employing sector of the agricultural industry.

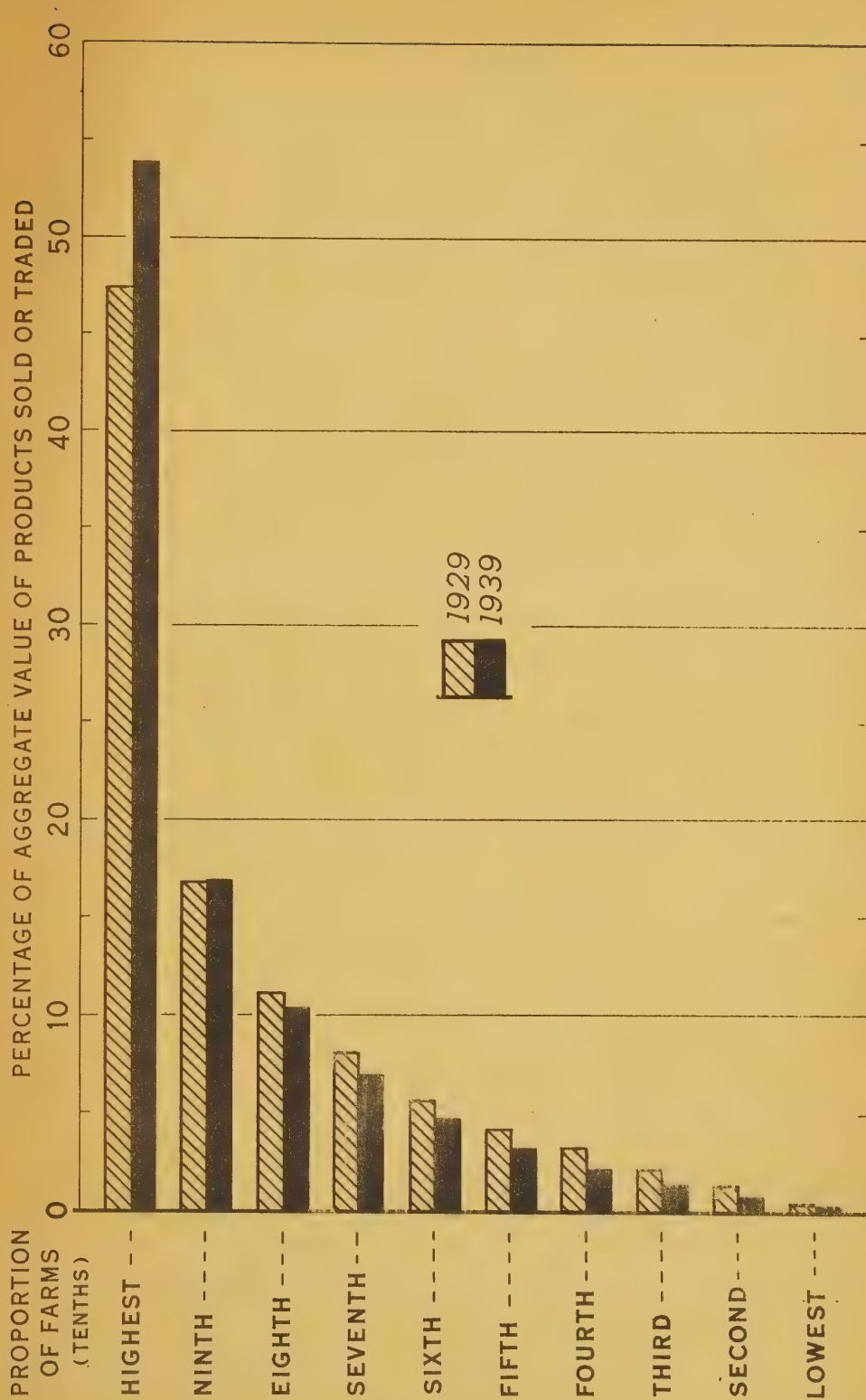
But national policies with respect to post-war agriculture cannot afford to overlook the pressing problems of low-income farmers, with due recognition of the indirect effects of such problems on wage conditions. These indirect effects arise from two directions. On the one hand, because the demand for agricultural products under given conditions of national income is relatively inelastic, even the small production contributed by the mass of noncommercial farms tends to depress farm prices. On the other hand, the large numbers of underemployed population on farms tend to depress farm wage standards.

That the conditions of low-income farmers are similar to those of hired farm workers is suggested by the fact that in 1939 the average net returns for family labor and management for all farms, which is heavily weighted with low-income farms, was almost identical with the average wages of the hired man who worked a full 12 months.

The interdependence of agricultural income with nonagricultural income, as has been mentioned, has implications for post-war policy regarding farm wages. The aspect usually considered in interpreting the relationship between the farm and nonfarm parts of the economy is that the greater purchasing power accompanying higher levels of employment in industry gives rise to an increased demand for farm products and thus produces a rise in agricultural prices and income. Another important aspect of the interrelationship, not always so explicitly realized, is the opportunity that expansion in nonagricultural employment affords the farm population for gainful work and improvement of their economic status, which may occur with or without migration.

During the 23 years since 1920, the farm population has had an average annual rate of natural increase of approximately 430,000 persons a year, (from the excess of the number of births over deaths in farm population) and an even

DISTRIBUTION OF MARKETING AGRICULTURAL PRODUCTS BY FARMS CLASSIFIED ACCORDING TO TOTAL VALUE OF PRODUCTS, UNITED STATES, 1929 AND 1939



ESTIMATES BASED ON DATA FROM THE 1930 AND 1940 CENSUSES OF AGRICULTURE

greater yearly increase in the number of persons of working age. Employment opportunities in agriculture have been decreasing as technological and other factors have stepped up the average productivity of farm workers and as certain processing functions shifted from agriculture to manufacturing. Maintenance of the level of living of farm people has therefore been dependent upon a continual drawing off of the excess population each year. Similarly, a sustained volume of migration from farms has tended to mitigate the depressing effect on wage rates of an excess supply of labor. Migration from farms is closely correlated with the off-farm occupational opportunities available. Since net migration from farms during the period 1920-44 has tended to exceed natural increase, the size of the farm population has varied inversely with the level of nonagricultural employment. This relationship is clearly indicated in figure 25.

The relationship between farm population and agricultural resources has so important a bearing on agricultural wage conditions as to constitute another major factor to be considered in post-war agricultural wage policy. There is a marked correspondence of areas of low farm wage rates with areas where the number of young people on farms reaching maturity each year is much greater than the number of jobs becoming available for them. 2/ The areas of low farm wage rates and high population pressure also correspond with areas of low rural level of living. 3/

Slackening off of urban employment or the presence of large-scale unemployment in the nonfarm population immediately slackens the rate of migration from farms so that surplus population and labor supply accumulate and aggravate the more-or-less chronic conditions in areas of population pressure. The presence of a large unemployed and underemployed farm labor supply has exerted a persistent downward pressure on farm wage rates in the past. In addition, farm wage rates have been highly vulnerable to the recurring cycles of mass urban unemployment which swelled the existing surplus labor supply.

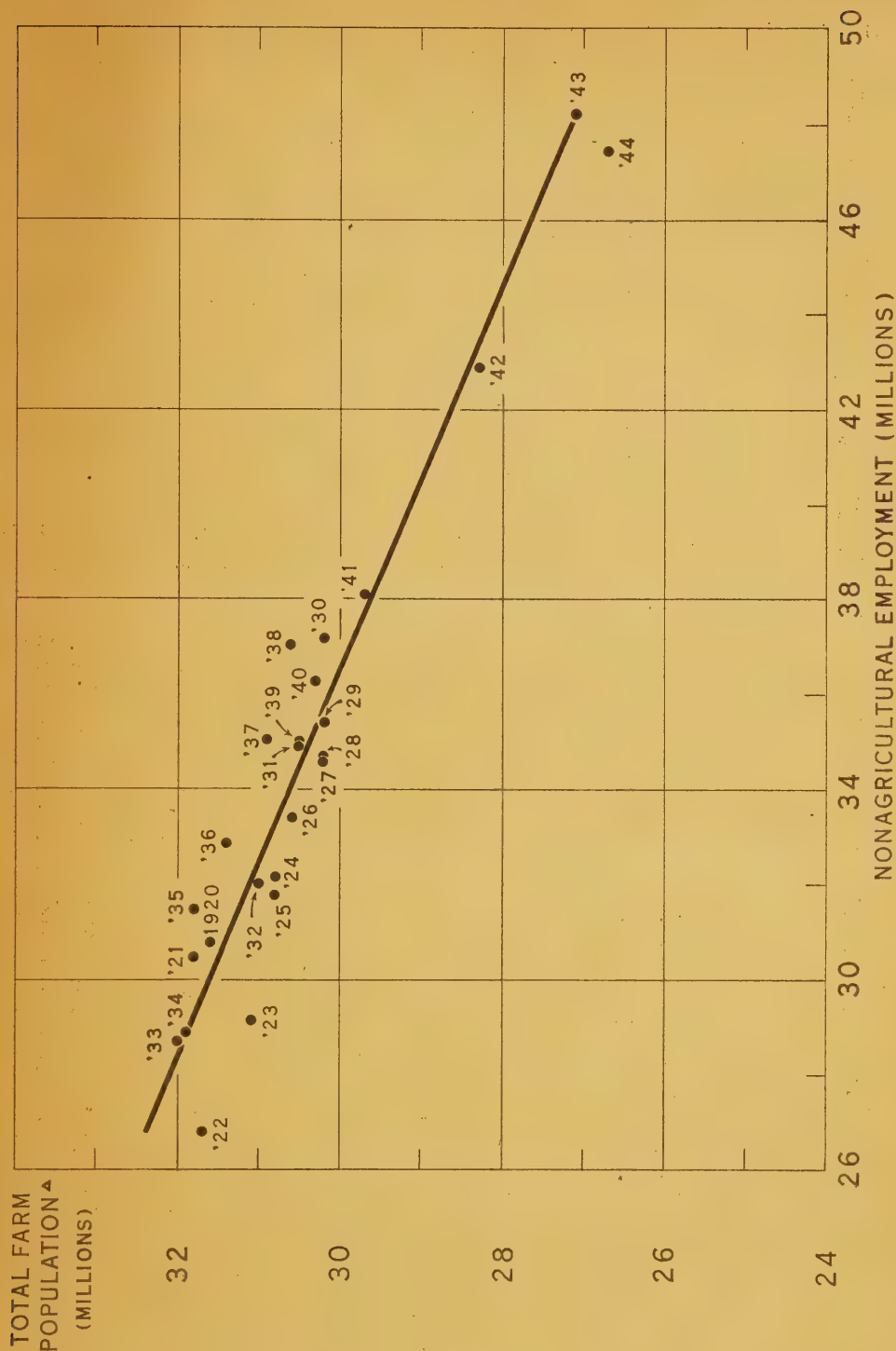
Even though migration from farms proceeded at a fairly rapid rate during the 1920's, it did not greatly relieve the pressure of population upon resources and employment opportunities for it was considerably offset by the high rate of natural increase. During the 1930 decade, migration from farms was offset completely by natural increase in the farm population. The number of people of working age living on farms increased even though the number actually working on farms was smaller at the end than at the beginning of the decade. As a result, when the 1940 Census was taken, about 1 million farm residents were unemployed, including persons on relief jobs.

During the present war, there has been an unprecedented migration from farms. The current level of farm population is approximately that which would have resulted if the 1916-30 trend had not been interrupted by the depression of the 1930's. With this reduction of the farm population, a better balance

2/ This is suggested by comparison of figure 8 in Chapter 3 with a map showing replacement rates of rural-farm men of working age by counties, prepared by the Bur. Agr. Econ. to be published later.

3/ A map showing county variation in rural level of living appears in Rural Level of Living Indexes for Counties of the United States, 1940, Bur. Agr. Econ. Oct. 1943

FARM POPULATION IN RELATION TO NONAGRICULTURAL EMPLOYMENT, UNITED STATES, 1920-44*



* FARM POPULATION FIGURES RELATE TO JAN. 1 OF INDICATED YEAR; ESTIMATES FOR 1941-44 ARE TENTATIVE AND SUBJECT TO REVISIONS.
NONAGRICULTURAL EMPLOYMENT FIGURES ARE ANNUAL AVERAGES FOR THE PRECEDING YEAR; THE 1940-43 NONAGRICULTURAL EMPLOYMENT FIGURES INCLUDE REPLACEMENTS FOR JOBS VACATED BY INDUCTIONS AND ENLISTMENTS OF NONFARM PERSONS.
△ INCLUDING PERSONS WHO ENTERED ARMED FORCES DIRECTLY FROM A FARM RESIDENCE.

of population to resources was established and this has been an influential factor in raising the level of living of both farmers and farm laborers. Should the movement reverse itself after the war to such an extent as to bring the farm population back to its pre-war level, there is little doubt but that farm wage rates would fall correspondingly simply from the pressure of the surplus labor supply. The effects of this surplus would be intensified by the reduced labor requirements which will probably result from an extensive buying of new farm machinery in the post-war years.

Regardless of what agricultural programs are fostered to improve or maintain the income of farmers, a large return of persons to subsistence farming who become available for hire on farms or for cheap wages in local industries will depress farm wage rates.

Even if there should be no extensive return migration to farms after the war, achievement of a desirable balance between farm population and resources in all areas of the country will require many years. It will require a long-time process of readjusting and absorbing perhaps several millions of families from marginal subsistence farming units into areas and occupations that provide better opportunities for the development and utilization of their abilities and efforts.

In the years following the war, agricultural wage conditions will continue to be affected by the fluctuations in general economic conditions that will mark the transition from full employment in wartime to a peacetime economy. This is true even though it is hoped that a high level of employment can be maintained. So long as there is any prospect in the post-war situation of a farm labor supply in excess of requirements, farm wages will inevitably be exposed to the harsh workings of competitive conditions, which will tend to depress them.

Under such conditions, farm workers will not be in a position to resist the downward pressure on their wages, partly because of the lack and inherent difficulties of effective organization among them. Employers of farm labor who will wish to maintain adequate wage standards consistent with farm income and price conditions may be forced to lower wages by the competition of other producers. It may be desirable, therefore, as a part of post-war agricultural wage policy, to invoke legislative help in behalf of wage standards, possibly along the lines afforded our industrial workers by the Fair Labor Standards Act of 1938, and to agricultural workers in Great Britain by The Agricultural Wages (Regulation) Act.

Although legislative measures of this kind can provide some degree of protection to wage standards in agriculture, other measures are needed to cushion the economic insecurity of farm workers--operators and wage hands alike. The extension of social security legislation to farmers and farm workers and of unemployment insurance to wage workers continue to be important post-war objectives.

The experience gained to date in the efficient routing and placement of farm workers together with the wider use by farmers of the Government employment services will tend to facilitate the effective functioning of such

services after the war. An adequate system of farm placement services can also help lessen the periods of unemployment of hired workers and of underemployment among some groups of farm operators.

Legislative measures cannot, however, be looked upon as offering a panacea for all problems affecting the economic well-being of farm workers. The challenging task for post-war agriculture is progressively to raise living levels for millions of low-income farm people--farmers, tenants, sharecroppers, and hired farm laborers. Policies to achieve this major objective will necessitate other measures directed toward making agriculture more efficient and better able to provide an adequate level of living to farmers and farm laborers. The measures must be broad enough to deal with internal and external conditions affecting agriculture.

Any statement of national agricultural policy after the war may well incorporate the principle that such policy is directed toward furthering the welfare of all the people engaged in agriculture, "Those who till the soil for hire as well as those who cultivate it as tenants or owners." ^{4/} Post-war objectives for farmers of real parity with nonfarm people--parity of income, of public services, of housing, of health facilities, of security--must also embrace the principle of parity for hired farm workers.

Realization of parity objectives for agriculture with other industries should also imply a parity of responsibility to pay and maintain adequate wages and other conditions of employment. Only in such a course can the best interest of agriculture be furthered since it will provide the incentives and opportunities for young people and workers to choose or continue in an agricultural occupation. A condition wherein the most capable agricultural workers seize the first opportunity to go off the land for almost any type of nonfarm job is not consistent with agriculture's own interest.

^{4/} In his Annual Report for 1937, the Secretary of Agriculture enunciated this principle in defining the functions of the Dept. of Agr.

